



Board of Directors Meeting Staff Report

TO: Board of Directors

FROM: Paul A. Sciuto, General Manager

MEETING DATE: April 26, 2021

AGENDA ITEM NO: 7 - B

SUBJECT: **Consider Approval of Resolutions 2021-05 and 2021-06 to Certify the 2021 Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Project and to Conditionally Approve the Proposed Modifications**

OVERVIEW

Initially, the Final SEIR for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment (PWM/GWR) Project was completed on April 13, 2020. Subsequently, the Final SEIR was updated based on Board direction to produce a new Final SEIR (the “2021 Final SEIR”). Staff has prepared the attached resolutions to enable the Board to: 1) certify the 2021 Final SEIR and make the necessary California Environmental Quality Act (CEQA) findings; and 2) approve the Proposed Modifications to the PWM/GWR Project as described in the 2021 Final SEIR subject to the following conditions:

- The resolution expressly *would not* authorize M1W staff to proceed with:
 - Entering into a Water Purchase Agreement with CalAm or another entity absent another Board approval. Prior to entering into any Water Purchase Agreement or amending or modifying the existing Water Purchase Agreement with CalAm and the Monterey Peninsula Water Management District concerning the Proposed Modifications to the PWM/GWR Project, M1W staff would be required to bring the terms of such agreement to the Recycled Water Committee for its recommendation, and to the full Board for its approval. The Board would retain full discretion as to whether to enter into a Water Purchase Agreement, and upon which terms.
 - Committing to make substantial expenditures or entering any contracts relating to the engineering design, permitting, construction or operation of the following components of the Proposed Modifications to the PWM/GWR Project: Modifications to the Advanced Water Purification Facility; Modifications to the Product Water Conveyance Pipeline; and Modifications to the Injection Well

Facilities. Prior to committing to make such expenditures or entering such contracts, M1W staff would be required to bring the expenditure requests and/or contracts to the Recycled Water Committee for its recommendation, and to the full Board for its approval. The Board would retain full discretion as to whether to prepare engineering designs and bid documents, permitting reports and applications, and construct such components of the Proposed Modifications.

- If approved, the resolution would authorize M1W staff to engage in exploratory discussions with CalAm and MPWMD regarding their interest in funding the Proposed Modifications and the potential terms of a Water Purchase Agreement or an amendment to the existing Water Purchase Agreement for the expanded quantities of water that could be delivered to CalAm by the Proposed Modifications.

COMMENTS FROM RECYCLED WATER COMMITTEE MEETING

During the Recycled Water Committee meeting on April 15, 2021, committee members discussed several aspects of the proposed Expanded PWM/GWR Project and the SEIR. The following briefly presents those comments and provides a response.

CalAm Pipeline in General Jim Moore. One committee member had questions about the CalAm facilities that are included in the Expanded PWM/GWR Project description, in particular, whether the 36-inch diameter pipeline within General Jim Moore Boulevard that was evaluated in the SEIR would be needed to implement the Expanded PWM/GWR Project and if so, whether a smaller pipeline, i.e., a 24-inch diameter, would suffice. The evidence in the record indicates that the 36-inch pipeline would be needed to fully implement the Expansion Project; therefore, it is appropriate to disclose the impacts of constructing the pipeline in the SEIR and in M1W's approval documents. In response to receiving this comment previously, staff worked with stakeholders and analyzed the information about that pipeline in the SEIR. The March and April Recycled Water Committee meeting and March Board meeting staff reports contain additional information about the 36-in CalAm potable pipeline and recommended keeping the pipeline in the SEIR documents and project description for purposes of SEIR certification and project approval. The size of the pipeline was determined by working with CalAm and MPWMD staff with expertise in the operations of the CalAm and MPWMD (ASR) systems. The SEIR acknowledges that these CalAm Facilities for the Expanded PWM/GWR Project are components that M1W does not control and thus approval of the Expanded PWM/GWR Project by M1W would not enable construction of the CalAm components without further approvals by public agencies with jurisdiction over construction of these facilities. Ultimately, it is possible that CalAm and public agencies considering approval of a pipeline within General Jim Moore could decide that a 24-inch pipeline would suffice. Such a pipeline would be within the scope of the SEIR's analysis. The potential for a reduction of the size of the pipeline to be constructed from 36-inch diameter to 24-inch diameter would not result in a new significant impact nor would it increase the severity any of the identified significant impacts. Similarly, the reduction in the size of the pipeline would not substantially lessen a significant impact of the Expanded PWM/GWR Project. This change can be made in the future for consideration by another entity issuing a subsequent required approval as a responsible agency, without causing major changes to the SEIR as written because reducing the diameter of a pipeline would not change the findings of the SEIR.

Conclusion: The information in the record supports keeping the pipeline as part of the Proposed Modifications. The Recycled Water Committee did not recommended changes to the SEIR, or project approval resolution related to the CalAm facilities components of the Expanded

PWM/GWR Project in the SEIR; therefore, this staff report does not request Board consideration of changes to the CalAm facilities.

SEIR Adequacy. One committee member asked whether more information has been developed to address prior comments regarding: (1) the SEIR's alternatives analysis related to the MPWSP, (2) cumulative impacts of the Proposed Modifications and the MPWSP, (3) water supply and demand for the Monterey Peninsula, and (4) source water for the Expanded PWM/GWR Project. The following provides a brief response to each of these previously identified issues:

1. *Alternatives Analysis.* The MPWSP is not an alternative to the Expanded PWM/GWR Project as defined by CEQA. The Expanded PWM/GWR Project has been proposed to be constructed in the event the MPWSP cannot be implemented in a timely manner. By definition, the MPWSP is not a feasible option to meet this project objective. Equally important, a project alternative must reduce the significant impacts of the project that is being analyzed. The MPWSP would not reduce any of the significant environmental impacts of the Expanded PWM/GWR Project as presented in the April 2020 Final SEIR Chapter 3, Master Response #5.

2. *Cumulative Analysis.* The MPWSP is addressed as a cumulative project for purposes of analyzing potentially overlapping construction impacts; however, the SEIR assumes that the Proposed Modifications would not operate if the MPWSP desalination project were operating pursuant to M1W Board Resolution 2019-19. Two projects would not need to operate at the same time to satisfy the same water supply demand. Additional detail is presented in April 2020 Final SEIR Chapter 3, Master Response #4.

3. *Water Supply and Demand.* M1W, as the CEQA lead agency for the SEIR, can rely upon substantial evidence as defined by CEQA to analyze a proposed project's environmental impacts. In this case, M1W is not proscribing use of any demand estimate for the CPUC, Cal-Am, or local governments. M1W does not have jurisdiction over these decisions. MPWMD is a project partner and is responsible for water resource management and planning for the Monterey Peninsula (which includes CalAm's Monterey District main system). M1W therefore, relies upon its project partners' analyses as the most recent, accurate, and relevant information available about water supply and demand to support the analysis of growth inducement and associated environmental impacts. This conservative assumption ensured that the amount of growth enabled by the Proposed Modifications is not underestimated, impacts are conservatively assumed to occur due to new growth enabled by increased adequate water supply for growth. It appears that there is a difference of opinion as to the ability of the Expanded PWM/GWR Project to accommodate long-term growth; however, differences of opinion do not render an EIR to be inadequate.

4. *Source Water for Proposed Modifications.* A response to comments on source water issues is provided in Master Response #3 in the April 2020 Final SEIR and in Attachment 3, within the M1W response to Latham and Watkins comments 5, 6, and 7. M1W may use existing, available regional treatment plant influent waters and new source waters that are available for M1W to use as secondary effluent to meet the influent needs of the Advanced Water Purification Facility (AWPF). Under the terms of existing agreements and the California Water Code, M1W possesses rights to sufficient influent volumes to meet the AWPF yield requirements of the approved PWM/GWR Project and the Proposed Modifications as described and demonstrated in the SEIR. In the future, the M1W Board may consider amendments to existing agreements or new agreements that would modify the rights to use wastewater discharged into M1W collection or treatment facilities in the future. At that time, relevant terms of such agreement(s) would have to be considered in light of any relevant contractual commitments for delivering recycled water,

including within Water Purchase Agreement(s) and or other funding agreements, and CEQA compliance would be required at that time.

PRIOR RELATED BOARD ACTIONS

On March 25, 2019, at a regular M1W Board Meeting, the Board considered and approved proceeding with funding preparation for environmental, permitting, and detailed design work for the potential expansion of the Pure Water Monterey Groundwater Replenishment (PWM/GWR) Project. The budget for the work was \$1,314,000 including \$750,000 from the Monterey Peninsula Water Management District (MPWMD), \$314,000 from California American Water Company (CalAm), and an additional \$250,000 in M1W funds that would be refunded by MPWMD if the expansion does not move forward. On October 28, 2019, the Board approved Resolution 2019-19 which restated and reiterated the Board's intentions that "the potential expansion of the Pure Water Monterey Project was a back up plan to, and not as an option in the place of, the CalAm desalination project," and was only being pursued "to have a ready-to-go alternative plan in place in the event that the CalAm desalination project is delayed beyond the Cease and Desist Order deadline of December 31, 2021." In March 2020, the Board also authorized additional work using unencumbered budget remaining and an additional \$36,804 of reimbursement from CalAm.

At the April 27, 2020 Board meeting, the Board received resolutions for certification of the SEIR (in that case comprised of only the 2020 Final SEIR completed in April 2020) and approval of the Proposed Modifications but did not act to certify the 2020 Final SEIR and approve the project and directed staff to cease work on the Proposed Modifications.

At the February 22, 2021 Board meeting, the Board considered and discussed potential actions on the SEIR to support a potential Expanded PWM/GWR Project approval. The Board discussed staff recommendations and received comments from members of the public. The Board directed staff to proceed with evaluation of the 2020 Final SEIR considering changes in the Proposed Modifications since the April 2020 SEIR was completed and requested staff to bring the item back for potential action.

At the March 29, 2021 Board meeting, the Board approved amending a cost sharing agreement with the MPWMD, a budget of \$230,000 and contracts for additional consultant and staff services to update the SEIR and for development of a regional water balance model to enhance stakeholder outreach. The M1W Board also voted to direct staff to update the SEIR based on the changes to the Injection Well Facilities and related effects on the project description and impact analysis in the SEIR, and to bring the project approval and SEIR certification to the Board for approval.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PROCESS

To initiate the CEQA process, M1W staff worked with CalAm and MPWMD staff to prepare a preliminary project description, including developing project objectives, physical locations and engineering design details at an appropriate level required to evaluate the environmental impacts of the Proposed Modifications. As directed by the Board, M1W prepared a Supplemental Environmental Impact Report (SEIR) because the information in the certified Final Environmental

Impact Report dated October 2015 (certified Final EIR)¹ contains information that is relevant to analyzing the impacts of the Proposed Modifications. On May 14, 2019, the Notice of Preparation (NOP) of the Draft SEIR was published for a 30-day review period (ending on June 14, 2019) to guide the scope of the environmental review. M1W received 25 comment documents on the NOP.

The Draft SEIR was prepared by Denise Duffy & Associates, M1W, and MPWMD staff with a team of resource specialists, engineers, and Perkins Coie, a law firm with expertise in CEQA. The Draft SEIR was published on November 7, 2019 for a public review period longer than the required 45-day time period, with comments being due December 23, 2019. M1W received several comment letters requesting an extension of the public review period and in response, on December 19, 2019, the M1W Board approved extending the public review period through January 31, 2020. During the public review period, M1W received a total of 52 comment documents (letters or emails) and conducted a public meeting. Two additional comment documents related to the environmental impacts were received after the close of the public review period and before publication of the April 2020 Final SEIR and were included in the Final SEIR.

Staff and M1W's consultants completed the Final SEIR on April 17, 2020. The April 2020 Final SEIR included all of the comment documents received during the Draft SEIR public review period, responses to the comments, and the recommended changes to the text of the Draft SEIR. **Attachment 1** (downloadable from the following link: purewatermonterey.org/reports-docs/) includes the Draft SEIR and the Final SEIR. DD&A has now completed an Environmental Memorandum (**Attachment 2**) which evaluates the changes to the Proposed Modifications since completion of the April 2020 Final SEIR. Attachment 2 is part of the 2021 Final SEIR.

Attachment 3 contains specific additional comment letters and emails related to environmental impacts, mitigation measures, and alternatives that were received after the comment period on the Draft SEIR but were received prior to publishing this staff report.

Attachment 4 contains Resolution 2021-05 with required and updated CEQA findings and a Mitigation Monitoring and Reporting Program (MMRP) that the Board can approve if the Board decides to certify the 2021 Final SEIR.

Attachment 5 contains Resolution 2021-06 to conditionally approve the Proposed Modifications to the PWM/GWR Project which would complete the CEQA process but would preclude further action without funding and Board approval for subsequent work.

FISCAL IMPACT

There would be no fiscal impact beyond previously budgeted expenditures at this time, because the 2021 Final SEIR certification and conditional approval of the Proposed Modifications would not trigger expenditures of any funds beyond those included and encumbered from the existing Expanded PWM/GWR budget without a future Board approval. Conditional approval would enable M1W staff to engage in discussions with CalAm and the MPWMD regarding a potential future funding agreement or Water Purchase Agreement amendment, and with other potential

¹ In January 2016, a Consolidated Final EIR was prepared including four volumes: I. Consolidated Final EIR (main body with changes incorporated), II. Appendices to the EIR, III. September 2015 Final EIR with response to comments of the Draft EIR, and IV. EIR Certification and Approval Documents.

funding entities. However, M1W staff would be precluded from any additional substantial expenditure (such as exceeding approved budgets) to proceed with engineering design, permitting, and construction of any M1W components of the Proposed Modifications without bringing such expenditures back to the Board for approval (M1W components include modifications to the Advanced Water Purification Facility, modifications to the Product Water Conveyance Pipeline, and modifications to the Injection Well Facilities as described in the 2021 Final SEIR).

RATIONALE FOR RECOMMENDED ACTIONS

Two resolutions are attached for consideration. The Board would need to approve Resolution 2021-05 (**Attachment 4**) (certify the 2021 Final SEIR, adopt CEQA findings, adopt a statement of overriding considerations for significant and unavoidable impacts, and adopt a MMRP) BEFORE approving Resolution 2021-06 (**Attachment 5**). The Board may choose to approve Resolution 2021-05 (**Attachment 4**) and NOT approve the project (i.e., not approve Resolution 2021-06 in **Attachment 5**), but that action would not complete the CEQA process for the Proposed Modifications such that the Proposed Modifications would be “shovel ready” if there is ever a need for them. By both certifying the SEIR and conditionally approving the project (i.e., such as the action described in Resolution 2021-06 (**Attachment 5**), a Notice of Determination can be filed with County Clerk to fully complete the CEQA process.

The M1W Board decision to certify the SEIR by approving a Resolution such as in **Attachment 4** (Resolution 2021-05) would represent that it the M1W Board:

1. has been presented with the 2021 Final SEIR and that it has reviewed and considered the information contained in the 2021 Final SEIR prior to making the certain findings and statement of overriding considerations provided in the Resolution;
2. certifies that the Final EIR, as supplemented by the 2021 Final SEIR, has been completed in compliance with CEQA and the CEQA Guidelines; and
3. certifies that the Final EIR, as supplemented by the 2021 Final SEIR, reflects its independent judgment and analysis.

Approval of the Resolution 2021-05 (**Attachment 4**) would document the Board’s determination that the 2021 Final SEIR complies with CEQA, as well as the written findings that must be made regarding the impacts of approving the Proposed Modifications, measures that must be implemented to mitigate those impacts, and a statement explaining why the benefits of the Proposed Modifications outweigh the two significant impacts that cannot be mitigated to a less-than-significant level.

The Resolution 2021-06 (**Attachment 5**) to conditionally approve the Proposed Modifications to the PWM/GWR Project was developed based on input received during prior committee and Board meetings expressing concern that there is currently no assurance of funding for the next steps of project implementation. Resolution 2021-06 (**Attachment 5**), would allow staff to engage in exploratory discussions with CalAm and MPWMD regarding their interest in funding the Proposed Modifications and the potential terms of a Water Purchase Agreement or amended Water Purchase Agreement for the expanded quantities of water that could be delivered to CalAm by the Proposed Modifications. The conditions would preclude M1W from entering into a Water Purchase Agreement or amending the existing Water Purchase Agreement without first bringing these documents back to the Board for approval. The conditions would also preclude expenditure of additional money not already encumbered to continue with design, permitting, and construction.

Approval of the Resolution 2021-06 (**Attachment 5**) would complete the CEQA process and enable M1W to be ready to proceed to design, permitting and construction, if the need should arise to implement the project. As discussed above, conditions in the approval resolution preclude specified further implementation actions related to the Proposed Modifications without a future M1W Board approval action.

RECOMMENDED ACTION

Staff recommends that the Board approve both resolutions with only minor, non-substantive changes to clarify, amplify, or correct the text, including:

- Resolution 2021-05 (**Attachment 4**) which would (1) certify the 2021 Final SEIR for the proposed modifications to the Pure Water Monterey Groundwater Replenishment Project, (2) adopt California Environmental Quality Act findings, (3) approve mitigation measures and a mitigation monitoring and reporting program, and (4) adopt a statement of overriding considerations; and
- Resolution 2021-06 (**Attachment 5**) which would approve the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, as described in the 2021 Final SEIR, subject to conditions.

Attachments:

1. 2019 Draft Supplemental Environmental Impact Report and the 2020 Final Supplemental Environmental Impact Report (dated November 7, 2019 and April 13, 2020, respectively) which are available for download at: purewatermonterey.org/reports-docs/.
2. Environmental Memorandum, Subject: Environmental Analysis on the Changes to the Expanded Pure Water Monterey Groundwater Replenishment Project, from Denise Duffy and Associates, dated April 19, 2021, which is part of the April 2021 Final Supplemental Environmental Impact Report.
3. Additional letters and emails related to environmental impact analysis received after 2020 Final SEIR preparation and prior to publication of the Board packet.
4. Resolution 2021-05 to certify the 2021 Final SEIR, approve a MMRP, adopt CEQA findings, and adopt a Statement of Overriding Considerations
5. Resolution 2021-06 to approve the Proposed Modifications to expand the PWM/GWR Project, as described in the 2021 Final SEIR, subject to Conditions.

ATTACHMENT 1

Please use the following weblink to download, print and/or view the
2020 Final SEIR : <https://purewatermonterey.org/reports-docs/>



Denise Duffy & Associates, Inc.

PLANNING AND ENVIRONMENTAL CONSULTING

MEMORANDUM

TO: Alison Imamura, Monterey One Water (M1W)

FROM: Diana Staines, AICP, Deputy Project Manager, DD&A

DATE: April 19, 2021

SUBJECT: Environmental Analysis for the 2021 Changes to the Injection Well Facilities

The attached Environmental Analysis updates the 2020 Final Supplemental Environmental Impact Report ("SEIR") for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment ("PWM/GWR") Project ("project"), specific to the 2021 Changes to the Injection Well Facilities. The Environmental Analysis was prepared by DD&A with input from M1W technical staff, and reviewed by M1W and Perkins Coie, M1W's CEQA Counsel. The analysis summarizes the project background and changes to the project description and resulting changes to the environmental analysis and conclusions by topical area since the 2020 Final SEIR. Exhibits are attached to support the information including a list of changes to the project description, a complete revised project description, and a summary of environmental impacts and mitigation measures of the Proposed Modifications to the PWM/GWR Project with changes.

**Environmental Analysis
of the
2021 Changes to the Expanded Pure Water Monterey
Groundwater Replenishment Project**

April 2021

Lead Agency:



Monterey One Water
Providing Cooperative Water Solutions

In Partnership with:



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Exhibits

Exhibit A.	Summary of Changes to the Project Description
Exhibit B.	Revised Project Description
Exhibit C.	Summary of Impacts and Mitigation Measures

Chapter 1 Introduction

This Environmental Analysis updates the Supplemental Environmental Impact Report (“SEIR”) for the Proposed Modification to the Pure Water Monterey Groundwater Replenishment (“PWM/GWR”) Project (“project”). Monterey One Water (“M1W”) as the lead agency has prepared this analysis in accordance with the California Environmental Quality Act (“CEQA”) and the State CEQA Guidelines, which are found in Title 14 of the California Code of Regulations commencing with Sec. 15000. The PWM/GWR Project was approved on October 8, 2015 after certification of the Final Environmental Impact Report (State Clearinghouse No. 2013051094) for the project. The Monterey Peninsula Water Management District (“MPWMD”) modified the project related to CalAm facilities and approved Addenda Nos. 1 and 2 on June 20, 2016 and on March 6, 2017, respectively. M1W modified the project and approved Addendum No. 3 on October 30, 2017.

An additional set of proposed modifications to the PWM/GWR Project (“Proposed Modifications”) were evaluated in the Final SEIR dated April 2020 (“2020 Final SEIR”). Those Proposed Modifications would result in an Expanded PWM/GWR Project.

Subsequent to completion of the 2020 Final SEIR, some minor changes to the Proposed Modifications have become necessary. The changes to the Proposed Modifications (and to the Expanded PWM/GWR) are specific to the Injection Well Facilities. Namely, since completion of the 2020 Final SEIR, M1W has proceeded with construction of two more of the previously approved injection wells in the same geographic area as was evaluated in the certified PWM/GWR Final EIR. By contrast, the Proposed Modifications described in the 2020 Final SEIR had included relocation of these two injection wells. Those relocations will no longer be necessary. This change results in the need for constructing only one additional deep well at the Expanded Injection Well Area that was evaluated in the 2020 Final SEIR for a total of nine approved wells (the same number as was evaluated in the 2020 Final SEIR). The Expanded Injection Well Area also could serve as a location for potential future replacement wells if replacement of existing wells is needed, but no replacement wells are proposed for approval at this time.

This analysis summarizes the project background and changes to the project description and assesses whether the changes to the project description results in changes to the environmental analysis and conclusions by topical area. Exhibits are attached to support the information in this analysis including a list of changes to the project description, a complete revised project description, and a summary of environmental impacts and mitigation measures of the project with changes.

Chapter 2 Project Background

M1W, in partnership with MPWMD and Marina Coast Water District, is implementing the PWM/GWR Project. Construction of the Advanced Water Purification Facility, conveyance facilities and critical source water and an initial set of injection well facilities are complete. Construction of additional injection well facilities is occurring this year through early 2022. The PWM/GWR Project is a water supply project that will serve northern Monterey County. The project provides: (1) purified recycled water for recharge of a groundwater basin that serves as drinking water supply; (2) purified recycled water for urban landscape

irrigation within Marina Coast Water District service area; and (3) recycled water to augment the existing Castroville Seawater Intrusion Project's agricultural irrigation supply. The PWM/GWR Project also includes a drought reserve component to support use of the new supply for crop irrigation during dry years.

M1W, as CEQA lead agency, certified the EIR for the PWM/GWR Project and the project was approved on October 8, 2015 per Board Resolution 2015-24. Since that time, three addenda have been prepared and approved that addressed changes to the PWM/GWR Project, as discussed above.

In March 2019, M1W voted to proceed with environmental review of Proposed Modifications to expand the PWM/GWR Project. The primary objectives of the Proposed Modifications are to reduce discharges of secondary effluent to Monterey Bay and to provide 2,250 AFY of additional purified recycled water for injection into the Seaside Groundwater Basin and subsequent extraction to replace the same quantity of CalAm's existing potable water supplies. On October 28, 2019, the Board approved Resolution 2019-19 which restated and reiterated the Board's intentions that "the potential expansion of the Pure Water Monterey Project was a back up plan to, and not as an option in the place of, the CalAm desalination project," and was only being pursued "to have a ready-to-go alternative plan in place in the event that the CalAm desalination project is delayed beyond the Cease and Desist Order deadline of December 31, 2021."

In order to provide an additional 2,250 AFY of purified recycled water for Seaside Basin injection and subsequent extraction for the CalAm service area, the Proposed Modifications to the PWM/GWR Project as described in the 2020 Final SEIR would include the following:

- M1W Facilities
 - improvements to the Advanced Water Purification Facility (AWPF) to increase peak capacity from 5 million gallons per day (mgd) to up to approximately 7.6 mgd;
 - addition of up to two miles of new product water conveyance pipelines connecting the purified recycled water reservoir to the Expanded Injection Well Area;
 - addition of one new deep injection well in the Expanded Injection Well Area and associated infrastructure;
 - relocation of two approved deep injection wells and associated infrastructure to the Expanded Injection Well Area;
 - relocation of previously approved monitoring well sites to the area between the Expanded Injection Well Area and the closest Extraction Wells located along General Jim Moore Boulevard;
- CalAm Facilities
 - addition of four new extraction wells, treatment facilities, and associated infrastructure; and,
 - addition of potable and raw water pipelines along General Jim Moore Boulevard and at the Seaside Middle School site.

The public review period for the Draft SEIR for the Proposed Modifications to the PWM/GWR Project occurred from November 7, 2019 to January 31, 2020. The 2020 Final SEIR was completed and provided to commenting agencies and agencies which requested it on April 13, 2020. At the April 27, 2020 Board meeting, staff provided resolutions for certification of the 2020 Final SEIR and approval of the Proposed Modifications, but the Board did not act to certify the 2020 Final SEIR nor to approve the Proposed Modifications.

At the February 22, 2021 Board meeting, the Board approved a motion for staff to proceed with evaluation of the SEIR considering changes in circumstances since the April 2020 Final SEIR was completed and requested staff to bring the item back for potential action. At the March 29, 2021 Board meeting, the Board voted to direct staff to update the SEIR based on the changes to the Injection Well Facilities description and the associated impact analyses in the SEIR, and to bring the project approval and SEIR certification to the Board for consideration at a future meeting. This analysis has been prepared to describe these changes to the description of the Proposed Modifications and to evaluate whether the changes to the project result in changes to the associated environmental analysis in the 2020 Final SEIR. This analysis is intended to be included in the Final SEIR, namely to create the comprehensive “2021 Final SEIR”.

Chapter 3 Changes to the Project Description

The following provides a brief overview of the PWM/GWR Project, the Expanded PWM/GWR Project and the changes to the Expanded PWM/GWR Project discussed in this analysis. The changes to the Expanded PWM/GWR Project identified in this analysis are specific to the Injection Well Facilities component of the Proposed Modifications. Other major components of the Proposed Modifications, such as additional equipment at the AWPf, additional conveyance facilities, and CalAm facilities are unchanged and therefore no changes to the 2020 Final SEIR are needed as to those components.

3.1 PWM/GWR Project (Certified PWM/GWR EIR, October 2015)

Under the original PWM/GWR Project, the Injection Well Facilities included four well sites, an electrical building, a backflush basin, and purified recycled and backwash pipelines. Each well site was approved to include one deep injection well, one shallow injection well (also referred to as a vadose zone well), and associated infrastructure for a total of eight injection wells (four shallow and four deep).

3.2 Expanded PWM/GWR Project (Final SEIR, April 2020)

The Expanded PWM/GWR Project described in the 2020 Final SEIR increased the area of the Injection Well Facilities and increased the number of injection wells from eight to nine, as shown on Figure 2-5 of the 2020 Final SEIR. Under this project modification, the Injection Well Facilities would be located within the “Approved Injection Well Area”, (shown in grey on Figure 2-5), and the Expanded Injection Well Area, (shown in pink on Figure 2-5). The Approved Injection Well Area includes four well sites (Well Sites 1, 2, 3, and 4) and the Expanded Injection Well Area includes three well sites (Well Sites 5, 6, and 7). The Approved Injection Well Area and the Expanded Injection Well Area would both include backflush basins. The Proposed Modifications to the PWM/GWR Project included relocating two of the deep injection wells from the Approved Injection Well Area to the Expanded Injection Well Area. Specifically, the deep injection well from Well Site 1 would move to Well Site 5 and the deep injection well from Well Site 4 would move to Well Site 7). Lastly, one additional deep injection well was proposed in the Expanded Injection Well Area at Well Site 6. The proposed Expanded PWM/GWR Project thus included a total of nine injection wells, including a new deep well at Well Site 6.

3.3 Changes to the Expanded PWM/GWR Project

Initially, M1W and MPWMD constructed four of the eight injection wells that were approved in 2015 (two shallow and two deep). Since the 2020 Final SEIR was completed in April 2020, M1W and MPWMD have begun construction of two additional deep injection wells in the locations approved in 2015 and evaluated in the PWM/GWR Final EIR. The third deep injection well (DIW-3) is being constructed at the northernmost well site (called Well Site #1) and the fourth deep injection well (DIW-4) is being constructed at the southernmost well site (called Well Site #4). No additional approved vadose zone wells are under construction; therefore, six of the eight approved wells will be operational within the next year. Because these two additional approved deep injection wells are now being built in the originally approved location, there is no longer a need to relocate them to the Expanded Well Injection Area analyzed in the 2020 Final SEIR.

The additional deep injection well proposed at Well Site 6 in the Expanded Injection Well Area and evaluated in the 2020 Final SEIR is still proposed at that site and would be built and operated as part of the Expanded PWM/GWR. Even with these changes, the Proposed Modifications to the PWM/GWR Project, would still result in a total of nine injection wells, one more than the approved PWM/GWR Project, consistent with the Expanded PWM/GWR Project and the 2020 Final SEIR. Additionally, the locations of the well sites in the 2020 Final SEIR would not be modified by these changes, as shown on **Revised Figure 2.5**.

The following describes the changes to the Injection Well Facilities since the 2020 Final SEIR, with revisions shown in strikeout (deleted text) and underline (added text) made to reflect the required changes addressed by this analysis.

Final SEIR Amended Section 2.6.4 Modifications to Injection Well Facilities

~~As noted previously above, the approved PWM/GWR Project included four Well Sites; however, only two of the four approved Well Sites have been constructed based on final design of the approved PWM/GWR Project. The two remaining Well Sites would be relocated as part of the Proposed Modifications. In addition, the Proposed Modifications also include the construction of an additional Well Site.~~

As previously discussed in **Section 2.1**, the Proposed Modifications include an increase in the amount of injection to achieve an additional 2,250 AFY of yield; a minimum of 90% of the project yield will be injected into the confined Santa Margarita Aquifer of the Seaside Groundwater Basin. Under the Proposed Modifications, 5,750 AFY on average would be injected into the Seaside Groundwater Basin (and a maximum of up to 5,950 AFY when the maximum drought reserve injections are occurring and less when the CSIP area is using the drought reserve).

The Proposed Modifications include an expansion of the area of temporary and permanent Injection Well Facilities, in an area referred to as the Expanded Injection Well Area. The Expanded Injection Well Area would contain up to three Well Sites ~~(including the relocation of two previously approved Well Sites)~~, numbered #5 through #7 (named from northeast to southwest). Under the Proposed Modifications, ~~the remaining two of the four approved deep Injection Wells would be relocated into the Expanded Injection Well Area. Well Site #4 would be relocated to the~~

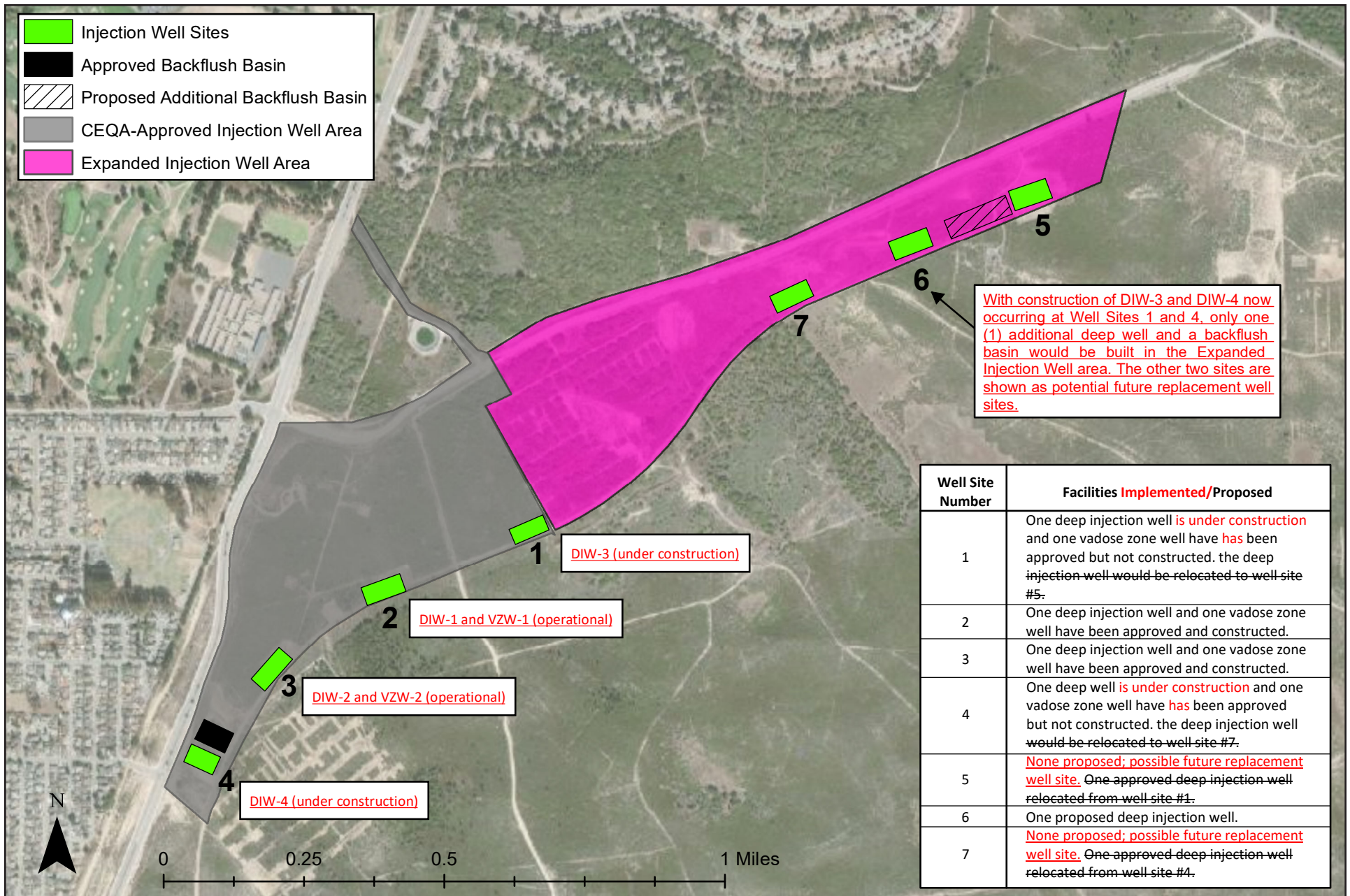
~~northeast to Well Site #7 in the Expanded Injection Well Area. Well Site #1 would be relocated to northeast of the original Injection Well Facilities area (referred to as Well Site #5 in the Expanded Injection Well Area). In addition one new deep Injection Well would be constructed and operated at Well Site #6. In the future, replacement an additional injection wells may be built at Well Sites #5 and/or #7, if needed to replace an injection one or more of the previously approved or constructed wells. However, no replacement well is proposed for approval. Further, nNo new vadose zone wells are proposed as part of the Proposed Modifications. Any replacement or relocation of approved or constructed wells would be subject to additional CEQA compliance, which could take the form of another Supplemental EIR or an Addendum depending upon the impacts associated with such relocation.~~

Table 1 below, provides a summary of the changes described above (revised from Table 2.4 of the 2020 Final SEIR)

Table 1.
Summary of Changes to the Injection Well Facilities

Well Site Number	Location of Well Site	PWM/GWR Project	Expanded PWM/GWR Project	Changes to the Expanded PWM/GWR Project
#1	Approved Injection Well Facilities Area	1 deep injection well 1 shallow injection well	1 shallow injection well	1 deep injection well 1 shallow injection well
#2	Approved Injection Well Facilities Area	1 deep injection well 1 shallow injection well	1 deep injection well 1 shallow injection well	1 deep injection well 1 shallow injection well
#3	Approved Injection Well Facilities Area	1 deep injection well 1 shallow injection well	1 deep injection well 1 shallow injection well	1 deep injection well 1 shallow injection well
#4	Approved Injection Well Facilities Area	1 deep injection well 1 shallow injection well	1 shallow injection well	1 deep injection well 1 shallow injection well
#5	Expanded Injection Well Area	Not Applicable	1 deep injection well	None proposed; possible future replacement well site
#6	Expanded Injection Well Area	Not Applicable	1 deep injection well	1 deep injection well
#7	Expanded Injection Well Area	Not Applicable	1 deep injection well	None proposed; possible future replacement well site
Total number of injection wells		8	9	9
Note 1. Well Sites 5 and 7 are shown as potential future replacement injection well sites. No additional new wells at Well Sites 5 and 7 nor relocation of existing approved wells to Sites 5 and 7 are proposed as part of the Expanded PWM/GWR Project. The Proposed Modifications under consideration in this analysis would result in an Expanded PWM/GWR project with a total of nine injection wells (five deep and four shallow); any replacement or relocation of approved or constructed wells would be subject to additional CEQA compliance, which could take the form of another Supplemental EIR or an Addendum depending upon the impacts associated with such replacement or relocation.				

Other major components of the Proposed Modifications, such as additional equipment at the AWPf, additional conveyance facilities, and CalAm facilities are unchanged; therefore, no additional changes in the 2020 Final SEIR are needed for those components. A complete list of changes to the project description since the 2020 Final SEIR is provided in **Exhibit A**. The complete SEIR Project Description showing changes made to the Draft SEIR project description in the 2020 Final SEIR and those described herein is provided in **Exhibit B**.



CEQA-Approved and Expanded Injection Well Area

November 2019 Revised March, 5 2021

Expanded PWM/GWR Project
Supplemental EIR

Figure
2-5

Chapter 4 Environmental Analysis

The analysis in this section addresses the changes to the Injection Well Facilities component of the Expanded PWM/GWR Project since the April 2020 Final SEIR was completed. The changes are referred to in this section as the “2021 Changes to the Injection Well Facilities.” Environmental impacts and mitigation measures of the other components of the Proposed Modifications to the PWM/GWR Project would be unchanged.

This section summarizes relevant environmental analysis and conclusions of the Expanded PWM/GWR Project Final SEIR (the document finalized April 13, 2020). The 2021 Changes to the Injection Well Facilities are then evaluated to determine if they would result in any new significant impacts not identified in the 2020 Final SEIR or if they would worsen the severity of any significant impacts identified in the 2020 Final SEIR. Finally, each individual topical section includes a conclusion regarding the Expanded PWM/GWR Project’s potential environmental effects.

4.1 Aesthetics

4.1.1 *Environmental and Regulatory Setting*

Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for aesthetic resources. The well site for the new deep injection well would be located within the same Expanded Injection Well Area as was presented in the 2020 Final SEIR for the Expanded PWM/GWR Project.

4.1.2 *2020 Final SEIR Summary and Findings*

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts on Scenic Views, Scenic Resources and Visual Quality of the Surrounding Areas (AE-1)
- Construction Impacts due to Temporary Light and Glare (AE-2)
- Degradation of Visual Quality of Sites and Surrounding Areas (AE-3)
- Operation Impacts due to Permanent Light and Glare (AE-4)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure AE-2: Minimize Construction Nighttime Lighting.
- Mitigation Measure AE-4: Exterior Lighting Minimization.

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.1.3 *Environmental Analysis of Changes since April 2020*

The 2021 Changes to the Injection Well Facilities would result in the same impact determinations for aesthetic resources during construction and operation as identified in the 2020 Final SEIR. The changes to

the Expanded PWM/GWR Project eliminate the need to relocate two deep injection wells to the Expanded Injection Well Area; instead, they are under construction within the previously Approved Injection Well Area, so their impacts were addressed in the PWM/GWR Project Final EIR. The proposed new deep injection well at Well Site 6 in the Expanded Injection Well Area would still be included as part of the Proposed Modifications and would be constructed at Well Site 6. These changes to the Expanded PWM/GWR Project would not change the physical boundaries or increase the size of the PWM/GWR Injection Well Facilities. The changes would not adversely affect the scenic vista, damage scenic resources, or degrade the visual character of the site as there is no significant changes proposed in the appearance or improvements of the facilities and no new nearby sensitive receptors. The conveyance pipelines would be located below-grade and would not be visible to the public consistent with the approved wells. The effects of above-ground structures at the Expanded Injection Well Area would be less than as identified in the 2020 Final SEIR because only one new well would be built in the Expanded Injection Well Area. The construction and operation of the wells would generate similar light and glare as evaluated in the 2020 Final SEIR and these impacts have been identified in the PWM/GWR Project EIR and in the 2020 Final SEIR. Mitigation measures applicable to the Injection Well Facilities component of the Expanded PWM/GWR Project would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.1.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.2 Air Quality and Greenhouse Gas

4.2.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for air quality and greenhouse gas emissions. The injection wells would be located within the same project area and air basin as was presented in the 2020 Final SEIR.

4.2.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Criteria Pollutant Emissions (AQ-1)
- Construction Exposure of Sensitive Receptors to Pollutant Emissions (AQ-2)
- Construction Odors (AQ-3)
- Construction Greenhouse Gas Emissions (AQ-4)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan.

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.2.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to air quality and greenhouse gas emissions during construction and operation as identified in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities would result in the same number of injection wells as were previously analyzed in the 2020 Final SEIR, and new construction would be in the same geographic area. Construction methods and requirements would not change. There would no additional construction disturbance, increase in construction or operational emissions or increase to operational air quality effects. Operation of the Expanded Project with 2021 Changes to the Injection Well Facilities would not expose any new sensitive receptors or generate additional GHG emissions, either directly or indirectly. Mitigation measures applicable to the Injection Well Facilities component of the PWM/GWR Project would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.2.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.3 Biological Resources: Fisheries

Neither the Approved Well Facilities Area nor the Expanded Injection Well Area is located within proximity to an aquatic resource supporting fisheries resources. Construction and operation of the Injection Well Facilities would not result in any operational changes to the surface water diversions (Reclamation Ditch and Blanco Drain) that are part of the approved PWM/GWR Project. No further discussion is included because there would be no impact to this resource associated with the Injection Well Facilities.

4.4 Biological Resources: Terrestrial

4.4.1 Environmental and Regulatory Setting

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for terrestrial biological resources. The well site for the new injection well would be within the same Expanded Injection Well Area as was presented in the 2020 Final SEIR.

4.4.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts to Special-Status Species and Habitat (BT-1)
- Construction Impacts to Sensitive Habitats (BT-2)

- Construction Conflicts with Local Policies, Ordinances, or Approved Habitat Conservation Plan (BT-3)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan.
- Mitigation Measure BT-1a: Implement Construction Best Management Practices.
- Mitigation Measure BT-1b: Implement Construction-Phase Monitoring.
- Mitigation Measure BT-1c: Implement Non-Native, Invasive Species Controls
- Mitigation Measure BT-1d: Conduct Pre-Construction Surveys for California Legless Lizard.
- Mitigation Measure BT-1e: Prepare and Implement Rare Plant Restoration Plan to Mitigate Impacts to Kellogg's Horkelia.
- Mitigation Measure BT-1f: Conduct Pre-Construction Protocol-Level Botanical Surveys within the remaining portion of the Biological Study Area
- Mitigation Measure BT-1h: Implementation of Mitigation Measures BT-1a and BT-1b to Mitigate Impacts to the Monterey Ornate Shrew, Coast Horned Lizard, Coast Range Newt, Two-Striped Garter Snake, and Salinas Harvest Mouse.
- Mitigation Measure BT-1i: Conduct Pre-Construction Surveys for Monterey Dusky-Footed Woodrat.
- Mitigation Measure BT-1j: Conduct Pre-Construction Surveys for American Badger.
- Mitigation Measure BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark.
- Mitigation Measure BT-1m: Minimize effects of nighttime construction lighting.
- Mitigation Measure BT-4: Fort Ord HMP Plant Species Salvage.

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.4.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to biological resources during construction and operation as identified in the 2020 Final SEIR. Prior biological resource surveys covered the entire area of the project including the Expanded Injection Well Area. Under the 2021 Changes to the Injection Well Facilities, the two deep injection wells that were proposed to be relocated to Well Site 5 and Well Site 7 in the Expanded Injection Well Area would not be relocated; instead, these wells are under construction at their original locations within the Approved Injection Well Area. This will result in one deep injection well and one shallow well at Well Sites 1 through 4 (with potential for construction and operation of shallow wells at Well Sites 1 and 4, which are approved, but have not yet been constructed. This is the same layout that was evaluated in the original PWM/GWR Project EIR. The additional deep injection well at Well Site 6 in the Expanded Injection Well Area is still proposed as part of the Expanded PWM/GWR Project. The Expanded Injection Well Area has already been evaluated for biological resources and mitigation measures have been incorporated to minimize impacts. Any mitigation measures applicable to the Injection Well Facilities component of the PWM/GWR Project would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.4.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.5 Cultural, Paleontological, and Tribal Resources

4.5.1 Environmental and Regulatory Setting

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for cultural, paleontological, and tribal resources. The location of these facilities is proposed in the same cultural setting and under the same regulatory framework as identified in the 2020 Final SEIR.

4.5.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts on Archaeological Resources or Human Remains (CR-1)
- Construction Impacts on Unknown Paleontological Resources (CR-2)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure CR-2b: Discovery of Archaeological Resources or Human Remains.
- Mitigation Measure CR-2c: Native American Notification.

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.5.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to cultural, paleontological, and tribal resources during construction and operation as was identified in the 2020 Final SEIR. Prior cultural resource surveys and completed consultations with Native Americans and the State of California Office of Historic Preservation covered the entire width and depth of construction activities associated with the project, including the Expanded Injection Well Area. The 2021 Changes to the Injection Well Facilities would not increase the size of the construction zone for the Injection Well Facilities. The Approved Injection Well Area in which the two deep injection wells are now being constructed was analyzed in the PWM/GWR Project Final EIR. The Expanded Injection Well Area was analyzed in the 2020 Final SEIR. Both areas already have been evaluated for cultural, paleontological, and tribal resources and mitigation measures have been incorporated to minimize impacts. Mitigation measures applicable to the Injection Well Facilities would be applicable to the changes to the Changes to the Injection Well Facilities. See **Exhibit C** of this analysis.

4.5.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.6 Energy and Mineral Resources

4.6.1 Environmental and Regulatory Setting

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for energy and mineral resources. The geographic and regulatory setting for energy resources is not changed and there are no significant mineral resources in the vicinity of the Injection Well Facilities.

4.6.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts due to Temporary Energy Use (EN-1)
- Operational Impacts due to Energy Use (EN-2)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure EN-1: Construction Equipment Efficiency Plan.

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.6.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact related to energy use during construction and operation as was identified in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities include the same total number of wells as was previously analyzed in the 2020 Final SEIR. No additional energy resources would be required for construction or operation of the wells. Construction of the Injection Well Facilities would have the same construction techniques and requirements. Well operations would not change in terms of the consumption of energy nor would the 2021 Changes to the Injection Well Facilities result in the unnecessary, wasteful, or inefficient use of energy resources. Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.6.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.7 Geology, Soils, and Seismicity

4.7.1 *Environmental and Regulatory Setting*

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for geology, soils, and seismicity. The location of these facilities would remain in the same general geological setting and under the same regulatory framework.

4.7.2 *2020 Final SEIR Summary and Findings*

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction-Related Erosion or Loss of Topsoil (GS-1)
- Construction-Related Soil Collapse and Soil Constraints during Pipeline Trenching (GS-2)
- Exposure to Seismic Ground Shaking and Liquefaction (GS-3)
- Hydro-Collapse of Soils from Well Injection (GS-4)

All the impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.7.3 *Environmental Analysis of Changes since April 2020*

The 2021 Changes to the Injection Well Facilities would result in the same level of impact related to geology, soils, and seismicity during construction and operation as was identified in the 2020 Final SEIR. The Approved Injection Wells Facilities Area in which two deep injection wells are now being constructed was analyzed in the PWM/GWR Project Final EIR. The Expanded Injection Well Area was analyzed in the 2020 Final SEIR. Geologic and soils conditions are consistent in the Injection Wells Facilities Areas as reported in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities would not alter the extent of potential geology and soils related effects due to ground-disturbing activities (e.g., soil erosion, etc.). No new or substantially more severe geology and soils effects would occur due to the proposed changes. The 2020 Final SEIR did not include any additional mitigation measures for geology, soils and seismicity. Construction Best Management Practices (BMPs) applicable to the Injection Well Facilities would continue to be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.7.4 *Conclusion*

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.8 Hazards and Hazardous Materials

4.8.1 *Environmental and Regulatory Setting*

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for hazards and hazardous materials.

4.8.2 *2020 Final SEIR Summary and Findings*

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Use and Disposal of Hazardous Materials During Construction (HH-1)
- Accidental Release of Hazardous Materials During Construction (HH-2)
- Construction of Facilities on Known Hazardous Materials Site (HH-3)
- Use of Hazardous Materials During Construction Within 0.25-Miles of Schools (HH-4)
- Wildland Fire Hazard during Construction (HH-5)
- Use and Disposal of Hazardous Materials During Operation (HH-6)
- Operation of Facilities on Known Hazardous Materials Site (HH-7)

All the impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.8.3 *Environmental Analysis of Changes since April 2020*

The 2021 Changes to the Injection Well Facilities would result in the same level of impact related to hazards and hazardous materials during construction and operation as was identified in the 2020 Final SEIR. The Approved Injection Well Facilities Area in which the two deep injection wells are currently being constructed and the Expanded Injection Well Area where the additional deep injection well would be constructed have already been evaluated for impacts related to hazards and hazardous materials. The transport and use of such materials would not change. See **Exhibit C** of this analysis for more information.

4.8.4 *Conclusion*

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.9 Hydrology/Water Quality: Groundwater

4.9.1 *Environmental and Regulatory Setting*

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for groundwater hydrology and water quality. The facilities would remain in the same general setting related to groundwater hydrology and water quality and under the same regulatory framework.

4.9.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Groundwater Depletion, Levels, and Recharge (GW-1)
- Construction Groundwater Quality (GW-2)
- Operational Groundwater Depletion and Levels: Salinas Valley Groundwater Basin (GW-3)
- Operational Groundwater Depletion and Levels: Seaside Basin (GW-4)
- Operational Groundwater Quality: Seaside Basin (GW-6)

All the impacts above were identified to be less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.9.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to hydrology and water quality of groundwater during construction as was identified in the 2020 Final SEIR. Under the 2021 Changes to the Injection Well Facilities, the two deep injection wells that were proposed to be relocated to Well Site 5 and Well Site 7 in the Expanded Injection Well Area instead are under construction in their original locations at the Approved Injection Well Area. The Approved Injection Well Area has been analyzed in the PWM/GWR Final EIR for locations for up to eight (8) injection wells and up to eight (8) monitoring wells. With an additional well in the Expanded Injection Well Area, a total of 5 deep and 2 shallow wells will be available for injection of the expanded volumes of purified water proposed to be injected (i.e., up to 5,950 AFY), with two additional shallow wells still available in the Approved Injection Well Area.

Analysis of existing and project future well capacities completed for the 2020 Final SEIR have found that excess capacity would be available to support adaptive management of the amount of injection into each well based on the results of groundwater modeling and monitoring. With five deep injection wells and two shallow wells, current analysis shows that the proposed injection volume of yield can be accommodated without operating every well at its full injection capacity and with one standby well. Based on this analysis, if modeling were to show travel time that does not meet minimum regulatory requirements, then wells can be placed into standby mode to ensure adequate response retention time and to provide acceptable underground travel time to support the relevant log removal value credits needed for virus and pathogen reduction.

In addition, as part of an amended Engineering Report required for the permit to expand the project, M1W intends to pursue additional virus and pathogen reduction credits (referred to as Log Removal Value or LRV). Currently, M1W does not utilize any credit for known pathogen and virus removal in the existing primary and secondary treatment and ozonation systems, which are known to inactivate or reduce viruses and pathogens. In addition, credits can be pursued by using strontium removal as a surrogate for virus removal through the existing reverse osmosis system, instead of removal of conductivity and total organic carbon. Finally, chloramines are currently used in the conveyance system to minimize biofouling in the

injection wells, and residual chlorine in the conveyance system can be measured to demonstrate reduction or inactivation of viruses and pathogens.

Further documentation of the ability for M1W to meet or exceed water quality regulatory requirements will be included in an amended Engineering Report, through additional virus and pathogen credits and through maintaining adequate underground retention time demonstrated by groundwater modeling. M1W will submit the required documentation to the State Water Resources Control Board Division of Drinking Water and to the Regional Water Quality Control Board for review and approval prior to increasing injection beyond the existing 3,700 AFY maximum injections. Further, the nine injection wells (existing, under construction, and proposed) have already been evaluated for other impacts to groundwater depletion, levels, and quality due to well construction and operation in the PWM/GWR Final EIR and 2020 Final SEIR. The conclusions regarding groundwater hydrology and water quality would be the same for the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.9.4 Conclusion

As described above, the 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.10 Hydrology/Water Quality: Surface Water

4.10.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for surface water hydrology and water quality. The facilities would remain in the same general setting related to surface water and under the same regulatory framework.

4.10.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts to Surface Water Quality due to Discharges (HS-1)
- Construction Impacts to Surface Water Quality due to Earthmoving and Drainage Alterations (HS-2)
- Operational Impacts to Surface Water Quality due to Well Maintenance Discharges (HS-3)
- Operational Drainage Pattern Alterations (HS-5)

The above impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.10.3 Environmental Analysis

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to hydrology and water quality of surface water during construction and operation as was identified in the 2020 Final

SEIR. Under the Changes to the Injection Well Facilities, the two deep injection wells had been proposed to be relocated to Well Site 5 and Well Site 7 in the Expanded Injection Well Area are now being constructed at their original locations within the Approved Injection Well Area. The Approved Injection Well Area has been analyzed in the PWM/GWR Final EIR. Further, the nine injection wells have already been fully evaluated for impacts to hydrology and water quality and potential impacts to surface water quality due to well construction and operation in the PWM/GWR Final EIR and 2020 Final SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.10.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.11 Land Use, Agriculture, and Forest Resources

4.11.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for land use, agriculture and forest resources. All facilities would remain in the same jurisdictional setting and land use setting as were previously identified in the 2020 Final SEIR; therefore, the environmental and regulatory framework would not change. There are no agricultural or forest resources in the vicinity of the Injection Well Facilities.

4.11.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Operational Consistency with Plans, Policies, and Regulations (LU-1)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- All other mitigation measures included in the 2020 Final SEIR.

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.11.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impacts related to land use during construction and operation as was identified in the 2020 Final SEIR. The Approved Injection Wells Facilities Area in which the two deep injection wells are currently being constructed was analyzed in the PWM/GWR Final EIR. The additional injection well would be constructed and operated in the Expanded Injection Wells Facilities Area that was evaluated for land use impacts in the 2020 Final SEIR.

Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.11.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.12 Marine Biological Resources

The Injection Well Facilities Areas are not located within proximity to marine biological resources and the 2021 Changes to the Injection Well Facilities would not result in any operational changes to the advanced water treatment facility compared to the operations that were analyzed in the 2020 Final SEIR. No further discussion is included because there would be no impact to this resource associated with the 2021 Changes to the Injection Well Facilities.

4.13 Noise and Vibration

4.13.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for noise and vibration. The injection wells would be constructed within the same Injection Well Facility Areas as were analyzed in the 2020 Final SEIR.

4.13.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Noise (NV-1)
- Operational Noise (NV-2)

All the impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.13.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact resulting from noise and vibration during construction and operation as was identified in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities would result in the same number of wells that were previously analyzed in the 2020 Final SEIR, therefore there would not be an increase in the intensity or duration of noise during construction or operation compared to the Expanded PWM/GWR Project. There would be no new nearby sensitive receptors near construction. Duration of the temporary construction noise would not be increased at any of the well construction sites; thus, construction noise impacts would remain the same with the 2021 Changes to the Injection Well Facilities. Impacts from operational noise would not increase compared to the results of the noise evaluation in the 2020 Final SEIR; noise would

not exceed noise level standards for any injection well sites. Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.13.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.14 Population and Housing

4.14.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting related to population and housing.

4.14.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the overall project, related to:

- Construction-Related Growth Inducement (PH-1)
- Operations-Related Growth Inducement (PH-2)

These impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.14.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impact related to population and housing during construction and operation as was identified in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities would not increase the total number of wells compared to the Expanded PWM/GWR Project and therefore would not result in additional short-term or long-term employment compared to the level identified in the 2020 Final SEIR. Further, the Changes to the Injection Well Facilities would not change project yield, and therefore would not change the potential for growth inducement compared to the potential for growth inducement disclosed in the 2020 Final SEIR. See **Exhibit C** of this analysis for more information.

4.14.4 Conclusion

The 2021 Changes to the Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.15 Public Services, Recreation, and Utilities

4.15.1 Environmental and Regulatory Setting

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for public services, recreation and utilities. The location of these facilities would remain in the same general setting for public services, and utilities and under the same regulatory framework. The Injection Well Facilities would not result in any impact to recreational facilities; therefore, no further discussion of recreational facilities is included.

4.15.2 2020 Final SEIR Summary and Findings

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Public Services Demand (PS-1)
- Construction Landfill Capacity (PS-2)
- Construction Solid Waste Policies and Regulations (PS-3)
- Public Services Demand During Operation (PS-4)
- Landfill Capacity for Operations (PS-5)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure PS-3: Construction Waste Reduction and Recycling Plan

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.15.3 Environmental Analysis of Changes since April 2020

The 2021 Changes to the Injection Well Facilities would result in the same level of impacts related to public services and utilities during construction and operation as was identified in the 2020 Final SEIR. The 2021 Changes to the Expanded PWM/GWR Project include the same total number of wells, which would be located in the same general area as was previously analyzed in the 2020 Final SEIR; therefore, there would not be an increase to the level of impact to public services or landfill capacity during construction or operation. Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.15.4 Conclusion

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.16 Traffic and Transportation

4.16.1 *Environmental and Regulatory Setting*

None of the 2021 Changes to the Injection Well Facilities would necessitate modifications to the environmental and regulatory setting for traffic and transportation. The location of these facilities would remain in the same general transportation setting and under the same regulatory framework.

4.16.2 *2020 Final SEIR Summary and Findings*

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Traffic (TR-1)
- Construction-Related Traffic Increases, Safety and Access Limitations (TR-2)
- Construction-Related Roadway Deterioration (TR-3)
- Construction Parking Interference (TR-4)
- Operational Traffic (TR-5)

The 2020 Final SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure TR-3: Roadway Rehabilitation Program

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.16.3 *Environmental Analysis of Changes since April 2020*

The 2021 Changes to the Injection Well Facilities would result in the same level of impact to the transportation network during construction and operation as was identified in the 2020 Final SEIR. The same amount of construction-related traffic would be needed as there is no change in the total number of wells to be constructed. Construction traffic routes and temporary impacts from traffic during construction and operation would be the same, as the wells would be located in the same areas as previously analyzed in the PWM/GWR Project Final EIR and 2020 Final SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the 2021 Changes to the Injection Well Facilities. See **Exhibit C** of this analysis for more information.

4.16.4 *Conclusion*

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

4.17 Water Supply and Wastewater Systems

4.17.1 *Environmental and Regulatory Setting*

The 2021 Changes to the Injection Well Facilities would not necessitate modifications to the environmental and regulatory setting for water supply and wastewater systems. The location, operation and management of these systems and supply facilities would continue under the same regulatory framework and the environmental setting provided in the 2020 Final SEIR.

4.17.2 *2020 Final SEIR Summary and Findings*

The 2020 Final SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction-Related Water Demand (WW-1)
- Construction-Related Wastewater Generation (WW-2)
- Operational Water Supply (WW-3)
- Operational Wastewater Treatment Capacity (WW-4)
- Operational Need for New Water or Wastewater Treatment Facilities or Expansion (WW-5)

All the impacts above were identified as less-than-significant. The 2020 Final SEIR did not include any additional mitigation measures. Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis.

4.17.3 *Environmental Analysis of Changes since April 2020*

No changes to the environmental analysis would occur due to the 2021 Changes to the Injection Well Facilities. Because there would be no increase in the total number of injection wells, construction-related water demand and wastewater generation would be the same as previously disclosed in the 2020 Final SEIR. Operational water supply would also remain the same as previously disclosed in the 2020 Final SEIR because the volumes needed to operate the Expanded PWM/GWR Project facilities would not change because of the 2021 Changes to the Injection Well Facilities.

4.17.4 *Conclusion*

The 2021 Changes to Injection Well Facilities would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2020 Final SEIR.

Chapter 5 Cumulative Impacts Analysis

5.1.1 *2020 Final SEIR Summary and Findings*

Cumulative Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2020 Final SEIR are summarized in **Exhibit C** of this analysis. **Table 2** in **Exhibit C** provides a summary of the cumulative impacts and the Proposed Modifications' contribution to those impacts, as applicable. The 2020 Final SEIR found that Project Modifications would not cause the PWM/GWR Project to make a

cumulatively considerable contribution to significant cumulative construction or operational impacts in all issue areas. Under Air Quality and GHG, the 2020 Final SEIR found that the total GHG emissions from the PWM/GWR Project with the Proposed Modifications, including the CalAm components, would not make a cumulatively considerable contribution to significant cumulative impacts associated with GHG emissions and the effects of climate change. The Final SEIR concludes “The Proposed Modifications would potentially make a considerable contribution to significant cumulative regional emissions of PM10; however, with implementation of Mitigation Measure AQ-1, the impact would be reduced to less than significant.”

5.1.2 Environmental Analysis of Changes since April 2020

No changes to the conclusions of the cumulative impact analysis would occur due to the 2021 Changes to the Injection Well Facilities. Because the 2021 Changes to the Injection Well Facilities do not increase the extent or intensity of any construction or operational activities, there would be no increase to the severity of any cumulative impacts nor would there be any new cumulative impacts as described in the discussions in sections 4.1 through 4.17, above. As described above, the 2021 Changes to Injection Well Facilities would not result in any new significant cumulative impacts or worsen the severity of any significant cumulative impacts previously identified in the 2020 Final SEIR.

Chapter 6 Growth Inducement

The 2020 Final SEIR concluded that the Proposed Modifications would induce growth in a manner that is comparable to that identified in the Monterey Peninsula Water Supply Project (“MPWSP”) Final EIR/EIS because the Proposed Modifications could induce growth indirectly by removing an obstacle to that growth (i.e., lack of available water). This growth would have the potential to result in adverse physical environmental effects. As a result, the Proposed Modifications could potentially have indirect, secondary significant impacts related to growth, some of which could be potentially unavoidable. In addition, the 2020 Final EIR found that the extent to which the Proposed Modifications would be able to accommodate growth is uncertain due to differing demand projections and approvals by the relevant land use jurisdictions.

As discussed above, the 2021 Changes to the Injection Well Facilities would not increase the number of injection wells, nor would they lead to a greater project water supply yield than what was included in the 2020 Final SEIR (i.e., the Proposed Modifications would increase the annual water supply available from the PWM/GWR Project by the same quantity with or without the Changes to the Injection Well Facilities: 2,250 AFY). The 2021 Changes to Injection Well Facilities would not result in a new significant growth inducement impact or worsen the severity of the previously identified impact in the 2020 Final SEIR. The 2021 Changes to the Injection Well Facilities result in the same conclusions relative to growth inducement for the Proposed Modifications as identified in the 2020 Final EIR.

EXHIBIT A.

SUMMARY OF CHANGES TO THE PROJECT DESCRIPTION

The table below provides a summary of the changes that have been made since the release of the Final Supplemental Environmental Impact Report ("SEIR") in April 2020.

Based on comments received from the public and from regulatory agencies on the Draft SEIR, the Project Description was revised by Monterey One Water ("M1W") prior to the preparation of the Final SEIR. The Final SEIR included a summary of the changes to the Project Description in Chapter 5.

The full revised Project Description reflecting the changes to the Proposed Modifications since the Draft SEIR in November 2019 is also included in **Exhibit B** to this memorandum.

Changes to the Injection Well Facilities and relevant background information are included below and discussed in more detail in the Environmental Memorandum. The Project Description includes discussion of potential changes to the Amended and Restated Water Recycling Agreement as well as minor project refinements made since the preparation of the Final SEIR, these changes are summarized below. For changes not related to the Injection Well Facilities, see page 6 of the CEQA Findings under the header, *Other Changes to Project Description*.

Summary of Changes to the Project Description		
Page	PWM/GWR EIR Section	Changes from April 2020 SEIR shown in Strike-out and Underline
2-5	2.1 (top of page; last two bullets of this section)	<ul style="list-style-type: none"> relocation of two previously approved Injection Well Sites and associated infrastructure to the Expanded Injection Well Area; and, relocation of one previously approved monitoring well⁶ to the area between the Expanded Injection Well Area and CalAm Extraction Wells (described below) located along General Jim Moore Boulevard.
2-7	2.1.2.4 Injection Well Facilities	<p>The approved PWM/GWR Project includes subsurface groundwater recharge facilities. The approved PWM/GWR Project includes four Well Sites that each include one shallow or vadose zone well and one deep Injection Well.¹² In addition to the four Well Sites, four on-site monitoring wells located within the Seaside Groundwater Basin are part of the approved PWM/GWR Project. The approved facilities are shown on Figure 2-2, the Approved Injection Well Facilities Area.</p> <p><u>Since the Final SEIR was completed in April 2020, M1W and MPWMD have begun construction of two additional deep injection wells. The first two vadose zone wells and the first two deep injection wells were completed in 2020 as part of the initial set of project improvements. The third deep injection well (DIW-3) is being constructed at the northernmost well site (called Well Site #1) and the fourth deep injection well (DIW-4) is being constructed at the southernmost well site (called Well Site #4). Both well sites are in the original Injection Well Facilities Area approved in 2015. No additional approved vadose zone wells are under construction; therefore, six of the eight approved wells will be operational within the next year. Because these two additional approved deep injection wells are now being built there is no longer a need to relocate them to the Expanded Well Area analyzed in the Supplemental EIR documents published in November 2019 (Draft Supplemental EIR) and in April 2020 (Final Supplemental EIR).</u></p> <p>While the approved PWM/GWR Project included four Well Sites, only two of those Well Sites have been constructed to date. Final project design and project permitting revealed that only two Well Sites, each with one vadose zone well and one deep Injection Well, were necessary to achieve the average injections of 3,500 AFY and maximum of 3,700 AFY. As a result, M1W constructed only two of the approved Well Sites (identified as Well Sites #2 and #3 in the PWM/GWR Project Final EIR), although the PWM/GWR Project Final EIR evaluated the environmental effects associated with the construction and operation of four Well Sites.</p>
2-8	Footnote 13	<p>¹³ MPWMD staff has prepared updated water demand estimates, which are provided in Appendix O of this Final SEIR. (MPWMD, March 13, 2020) <u>Revisions to the water demand analysis were subsequently approved by the MPWMD on May 18, 2020 and again on February 25, 2021. The revisions do not change the environmental analysis (impacts and mitigation measures) nor the alternatives analysis in the Final Supplemental EIR.</u> More information is provided in Chapter 5 <u>of the Final SEIR and on the MPWMD website at www.mpwmd.net/water-supply/water-supply-overview/supply-and-demand-for-water-on-the-monterey-peninsula/.</u></p>
2-15	2.6.1.1 Amended and Restated Water Recycling Agreement	<p>Several flows that are treated at the Regional Treatment Plant are considered to be <u>come from</u> out of the 2001 M1W Service Area, <u>and/or originate from on-site or near the Regional Treatment Plant,</u> and thus, pursuant to the ARWRA section 4.01(2), rights to these wastewater flows would be evenly divided between M1W and MCWRA, including</p> <ul style="list-style-type: none"> Backwash flows from the Salinas River Diversion Facility screening process (totaling up to approximately 200 AFY, when the facility is operating and limited to April through September). Filter backwashing flows from the mixed media filters at the Salinas Valley Reclamation Plant (totaling approximately 2,000 <u>1,800</u> AFY peaking in the summer months). Advanced Water Purification Facility filter backwash and clean in place flows (approximately 900 AFY spread evenly throughout the year). <u>Local Waste Recycled</u> Sumps #1 and #2 flows (previously referred to as Recycled Sump #1 and #2) that treat wastewaters generated on-site and at the adjacent landfill (approximately 300 AFY).

		<ul style="list-style-type: none"> Several areas in and around the City of Salinas and the community of Castroville (currently only the western annexation of the Boronda area constitute substantive flows with those total approximately 200 AFY evenly spread throughout the year).
2-17	2.6.1.1 Amended and Restated Water Recycling Agreement	<p>As described above, ARWRA, section 4.01 designates water rights to wastewater flows originating from outside of M1W's 2001 service area as equally split between M1W and MCWRA. The M1W Regional Treatment Plant and surrounding land, including the Monterey Regional Waste Management District land, are located outside of M1W's 2001 boundaries; thus, M1W assumes section 4.01 applies to wastewaters originating from these areas. <u>An amendment to the ARWRA is currently being negotiated which could change section 4.01 to change the allocation to some of the wastewater flows described above. The proposed amendment terms were discussed at the March 2021 Recycled Water Committee and Board meetings. M1W staff has analyzed the proposed changes to source water allocation in section 4.01 and has confirmed that the proposed changes would not result in other changes to the project description nor to the conclusions related to environmental impacts and mitigation measures, nor alternatives in the SEIR. This section will remain in effect whether or not conditions precedent in ARWRA section 16.15 are met, because Section 4.01 is not applicable to New Source Waters.</u></p>
2-21	2.6.2 Modifications to the Advanced Water Facility	<p>Table 2-1 Expanded AWPf Typical Monthly Flow Volumes, shows an example of the proposed seasonality of flow and production. Although the data is presented here as a single set of flows by month, actual system operation would require daily or weekly management of the production rates to address the variability in irrigation demands and supply availability. Source water diversions would be similarly managed to maximize water availability for all irrigation users during the peak irrigation season. For example, with peak MCWD and SVRP demands, AWPf source water <u>inflow in some months could be as low as 259 AF per month, with increased yield being delivered in October through March each year.</u></p>
2-21	Table 2-1 Expanded Advanced Water Purification Facility – Typical Monthly Flow Volumes (AF)	<p><u>AWPF Inflow</u> Source Waters</p>
2-24	Figure 2-5 Expanded Injection Well Area	<p>This figure has been revised.</p>
2-25	2.6.4 Modifications to Injection Well Facilities	<p>As noted previously above, the approved PWM/GWR Project included four Well Sites; however, only two of the four approved Well Sites have been constructed based on final design of the approved PWM/GWR Project. The two remaining Well Sites would be relocated as part of the Proposed Modifications. In addition, the Proposed Modifications also include the construction of an additional Well Site.</p> <p>As previously discussed in Section 2.1, the Proposed Modifications include an increase in the amount of injection to achieve an additional 2,250 AFY of yield; a minimum of 90% of the project yield will be injected into the confined Santa Margarita Aquifer of the Seaside Groundwater Basin. Under the Proposed Modifications, 5,750 AFY on average would be injected into the Seaside Groundwater Basin (and a maximum of up to 5,950 AFY when the maximum drought reserve injections are occurring and less when the CSIP area is using the drought reserve).</p> <p>The Proposed Modifications include an expansion of the area of temporary and permanent Injection Well Facilities, in an area referred to as the Expanded Injection Well Area. The Expanded Injection Well Area would contain up to three Well Sites (including the relocation of two previously approved Well Sites), numbered #5 through #7 (named from northeast to southwest). Under the Proposed Modifications, the remaining two of the four approved deep Injection Wells would be relocated into the Expanded Injection Well Area. Well Site #4 would be relocated to the northeast to Well Site #7 in the Expanded Injection Well Area. Well Site #1 would be relocated to northeast of the original Injection Well Facilities area (referred to as Well Site #5 in the Expanded Injection Well Area). In addition, one new deep Injection Well would be constructed and operated at Well Site #6. <u>In the future, replacement of additional injection wells may be built at Well Site #5 or #7, if needed to replace an injection wells. However, no replacement well is proposed for approval.</u> Further, no new vadose zone wells are proposed as part of the Proposed Modifications.</p>

2-25	Footnote 16	The Approved PWM/GWR Project included analysis of eight total Injection Wells: four shallow and four deep. The Expanded PWM/GWR Project will require eight <u>would include up to nine (9) total Injection Wells with up to five deep Injection Wells and up to three <u>four</u> shallow Injection Wells.</u>																								
2-25	Table 2-4 Injection Well Site Summary	<p>Table 2-4 Injection Well Site Summary</p> <table> <tr> <th>Well Site Number</th><th>Location of Well Site</th><th>Status of Injection Wells</th></tr> <tr> <td>#1</td><td>Approved Injection Well Facilities Area</td><td>1 deep injection well and 1 vadose zone well have been approved but not constructed; and the deep injection well is <u>under construction at Well Site #1. would be relocated to Well Site #5 (the farthest northeastern well site)</u></td></tr> <tr> <td>#2</td><td>Approved Injection Well Facilities Area</td><td>1 deep injection well and 1 vadose zone well have been approved and constructed</td></tr> <tr> <td>#3</td><td>Approved Injection Well Facilities Area</td><td>1 deep injection well and 1 vadose zone well have been approved and constructed</td></tr> <tr> <td>#4</td><td>Approved Injection Well Facilities Area</td><td>1 deep injection well and 1 vadose zone well have been approved but not constructed; and the deep injection well would be relocated to Well Site #7 <u>is under construction at Well Site #4.</u></td></tr> <tr> <td>#5</td><td>Expanded Injection Well Area</td><td>1 approved deep injection well relocated from Well Site #4 <u>Well Site #5 is a potential site for a future new deep injection well to replace an injection well; however, no replacement well is proposed for approval</u></td></tr> <tr> <td>#6</td><td>Expanded Injection Well Area</td><td>1 newly proposed deep injection well</td></tr> <tr> <td>#7</td><td>Expanded Injection Well Area</td><td>1 approved deep injection well relocated from Well Site #4 <u>Well Site #7 is a potential site for a future new deep well to replace an injection well; however, no replacement well is proposed for approval.</u></td></tr> </table> <p>* For groundwater modeling, this SEIR assumes all shallow (vadose zone) injection wells will operate at Well Sites #2 and #3 and that the approved vadose zone well at Well Site #1 is not needed. The number of wells assumed for the proposed Expanded PWM/GWR Project is eight total; however, groundwater modeling was conducted assuming seven total, five deep injection wells and two vadose zone wells and a 90%/10% split on a volumetric basis between deep and shallow aquifers. <u>M1W will conduct additional groundwater modeling as required for permitting for the Expanded PWM/GWR Project using the approved well configuration and based on updated injection well capacities developed during design and well testing.</u></p>	Well Site Number	Location of Well Site	Status of Injection Wells	#1	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved but not constructed ; and the deep injection well is <u>under construction at Well Site #1. would be relocated to Well Site #5 (the farthest northeastern well site)</u>	#2	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved and constructed	#3	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved and constructed	#4	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved but not constructed ; and the deep injection well would be relocated to Well Site #7 <u>is under construction at Well Site #4.</u>	#5	Expanded Injection Well Area	1 approved deep injection well relocated from Well Site #4 <u>Well Site #5 is a potential site for a future new deep injection well to replace an injection well; however, no replacement well is proposed for approval</u>	#6	Expanded Injection Well Area	1 newly proposed deep injection well	#7	Expanded Injection Well Area	1 approved deep injection well relocated from Well Site #4 <u>Well Site #7 is a potential site for a future new deep well to replace an injection well; however, no replacement well is proposed for approval.</u>
Well Site Number	Location of Well Site	Status of Injection Wells																								
#1	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved but not constructed ; and the deep injection well is <u>under construction at Well Site #1. would be relocated to Well Site #5 (the farthest northeastern well site)</u>																								
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2-27	2.6.4 Modifications to Injection Well Facilities	Percolation basins are required for disposal of periodic well backflushing cycles, and for disposal of well development and testing water for new or rehabilitated wells. Percolation basins located within the wellfield recharge to the vadose zone. The approved PWM/GWR Project assumed one basin, which was recently constructed at Well Site #4. The backflush cycles are were <u>planned to occur weekly, flushing at a rate of 2,624 gpm for four hours, but have recently been conducted at 1,000 to 2,000 gpm for two hours.</u> This produces approximately 84,200 cubic feet of water, or 1.9 acre-feet. The approved basin at Well Site #4 holds 2.1 acre-feet of water, which allows 1-foot of freeboard. At a percolation rate of 6-inches per hour, the pond drains in under 24-hours based on well development water during construction of the first two project deep Injection Wells. The target flow rate for well testing and development is 2,500 gpm for eight hours. This produces a volume of 160,430 cubic feet, or 3.7 acre-feet. A percolation basin of 4.0 acre-feet is recommended to hold that volume of water with a minimum of 1-ft of freeboard. A basin of that size would also accommodate backflushing two wells in sequence without a lag-day to allow for percolation. A second percolation basin would be constructed to accommodate the additional well development and backflush water from the Expanded Injection Well Area between Well Sites #5 and #6 as shown on Figure 2-5 . The new percolation basin would have a capacity of 4.0 acre-feet, requiring the excavation of approximately 6,500 cubic yards of material and placing it on the adjacent slopes or using it to create level Well Sites. The total area of soil disturbance is approximately 1.5-acres.																								
2-34	Table 2-6 Summary of Temporary and Permanent Footprint of	Product Water Conveyance Pipeline <u>(worst case lengths assumed for a pipeline to Well Site #7)</u>																								

REVISED PROJECT DESCRIPTION

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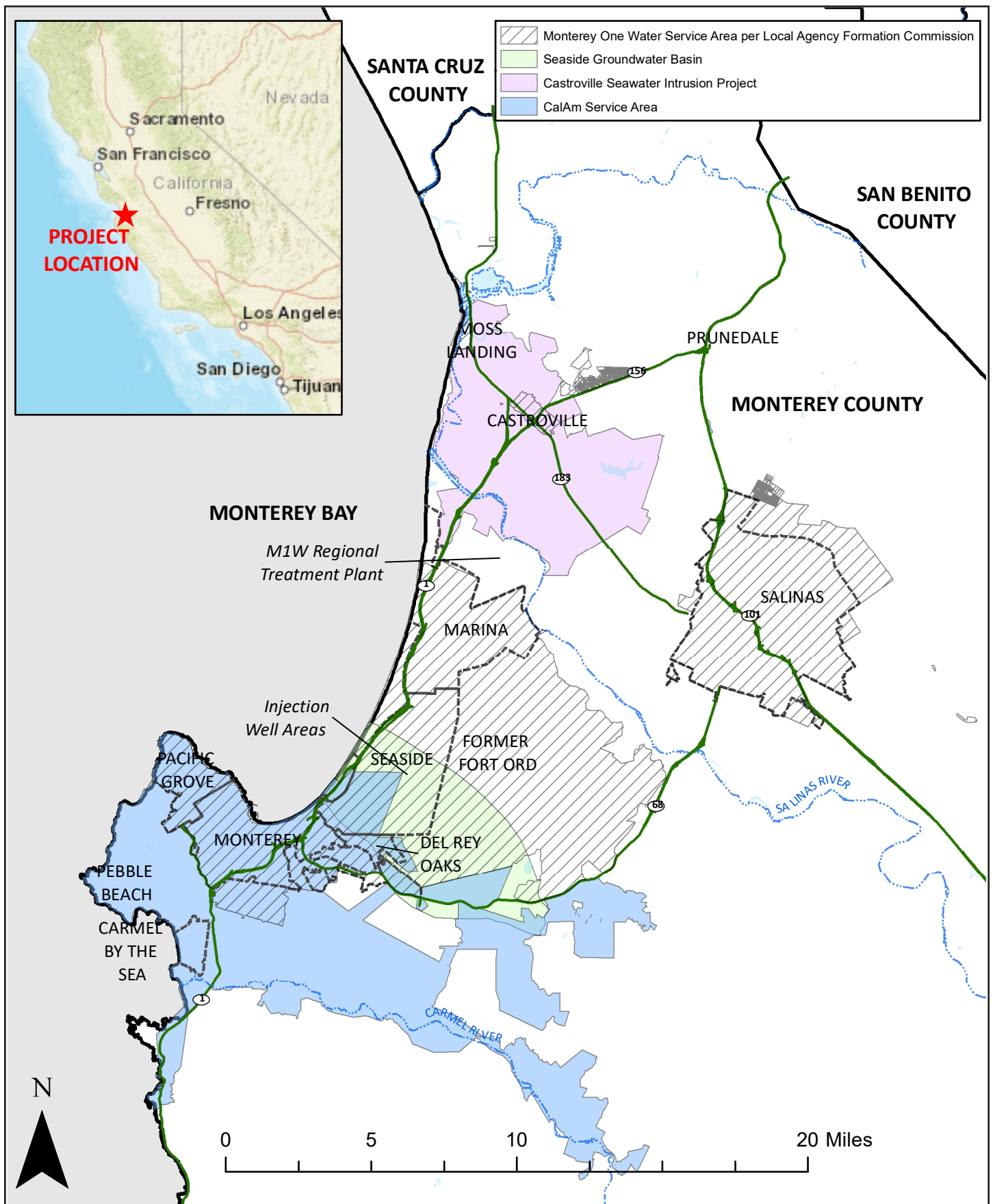
CHAPTER 2 PROJECT DESCRIPTION

2.1 INTRODUCTION

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2.1.2 Overview of Approved PWM/GWR Project Components		2-3 Proposed Modifications to PWM/GWR Project
2.2 Project Background	2-2 Expanded Advanced Water Purification Facility Design Summary	2-4 Advanced Water Purification Facility Site Plan
2.2.1 SWRCB Orders to Reduce Carmel River Diversions	2-3 Expanded Advanced Water Purification Facility Process Design Flow Assumptions	2-5 CEQA-Approved and Expanded Injection Well Area
2.2.2 Relationship of Expanded PWM/GWR Project to MPWSP	2-4 Injection Well Site Summary	2-6 Conceptual Design Profile for Deep Injection Well
2.3 Location of the Proposed Modifications	2-5 Expanded Injection Flows, Including Drought Reserve	2-7 Proposed Modifications to CalAm Distribution System
2.4 Objectives of the Proposed Modifications	2-6 Summary of Temporary and Permanent Footprint of Proposed Modifications	2-8 Extraction Well Facilities Flow Schematic
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2.6.1 Source Water under Proposed Modifications		
2.6.2 Modifications to the Advanced Water Purification Facility		
2.6.3 Modifications to Product Water Conveyance		
2.6.4 Modifications to Injection Well Facilities		
2.6.5 Modifications to CalAm Facilities for Expanded PWM/GWR Project		
2.6.6 Overall Energy Demand of Proposed Modifications		
2.7 Permits and Approvals		

M1W, in partnership with the MPWMD, is proposing modifications to the approved Pure Water Monterey Groundwater Replenishment Project (Expanded PWM/GWR Project or Proposed Modifications) which would expand the project yield. M1W approved the PWM/GWR Project in 2015 to create a reliable source of water supply to replace existing water supply sources for the Monterey Peninsula in northern Monterey County. M1W approved modifications to the PWM/GWR Project in 2016 and 2017. This Supplemental EIR evaluates new Proposed Modifications, which are considered a back-up to the CalAm MPWSP.¹ As a back-up, the Proposed Modifications would increase the amount of purified recycled water produced by the PWM/GWR Project, which is currently under construction. **Figure 2-1** shows relevant water resource areas and service areas.

¹ On October 28, 2019, the M1W Board of Directors adopted Resolution No. 2019-19 stating that M1W's previous approval to proceed with the potential expansion of the Pure Water Monterey Project was done "only as a back-up plan for, and not as an alternative to, CalAm's desalination project." As stated in the draft resolution, "the purpose and intent of this Resolution, therefore, is to clarify and restate, for the record, the understanding and basis upon which this Board has proceed with looking into and working on the expansion of the PWM Project." Specifically, the draft resolution stated that M1W's "prior approval of proceeding with the initial environmental, permitting and design work for the potential expansion of the Pure Water Monterey Project was done specifically as a backup plan to, and not as an option in the place of, the CalAm desalination project, and only to have a ready-to-go alternative plan in place in the event that the CalAm desalination project is delayed beyond the Cease and Desist Order deadline of December 31, 20192021."



Relevant Service Areas and Water Bodies

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The approved PWM/GWR Project will produce a reliable water supply by treating previously discharged secondary effluent with the Advanced Water Purification Facility² and recharging the Seaside Groundwater Basin with the purified recycled water using a series of shallow and deep Injection Wells. Once injected into the Seaside Groundwater Basin, treated water will mix with the groundwater present in the aquifers and be stored for future extraction and use. The approved PWM/GWR Project will replace 3,500 AFY of supplies for CalAm to deliver to its customers in the Monterey District service area. This will enable CalAm to reduce its diversions from the Carmel River system.³ CalAm is under a State order to secure replacement water supplies by December 2021.⁴

Initially, the approved PWM/GWR Project included an Advanced Water Purification Facility that had an operational capacity of 4.0 mgd. In 2017, M1W approved a modification to the PWM/GWR Project that expanded the treatment capacity of the Advanced Water Purification Facility to provide an additional 600 AFY of purified recycled water to the Marina Coast Water District for irrigation use. More specifically, M1W increased the Advanced Water Purification Facility operational capacity from 4.0 mgd to 5.0 mgd by refining plant design.

These design refinements included: 1) minor changes to the secondary effluent diversion structure to convey additional treated wastewater into the Advanced Water Purification Facility; 2) the addition of booster pumping of the ozone effluent and pre-treated reverse osmosis feed; and, 3) minor changes to the design of the waste equalization pump station. All of these improvements occurred within the existing footprint of the Advanced Water Purification Facility (Please refer to discussion below for a full description of the approved PWM/GWR Project).⁵

Figure 2-2 shows the approved PWM/GWR Project facility locations.

The Proposed Modifications would expand the Advanced Water Purification Facility peak capacity from 5 million gallons per day (mgd) to 7.6 mgd and increase recharge of the Seaside Groundwater Basin by an additional 2,250 AFY (for a total average yield of 5,750 AFY). The Proposed Modifications are considered a “back-up plan” to the MPWSP, CalAm’s planned 6.4 mgd desalination project. The Proposed Modifications would be implemented if the MPWSP encounters obstacles that prevent its timely, feasible implementation.

The Proposed Modifications include the following new or modified M1W facilities:

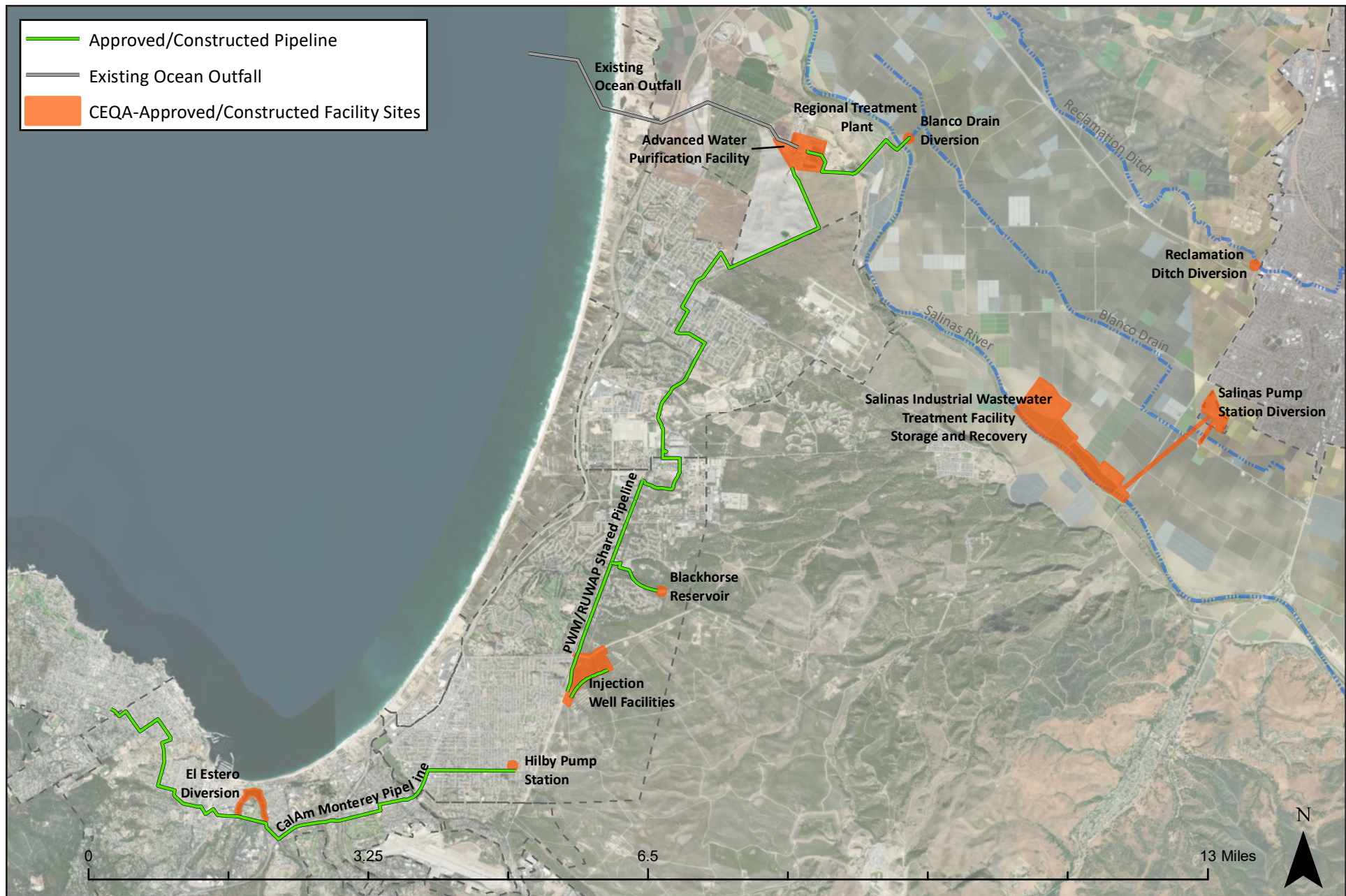
- improvements to the existing PWM/GWR Project Advanced Water Purification Facility (adding equipment, pipelines, and storage within the existing plant site);
- up to two miles of new product water conveyance pipelines;
- one new Injection Well in the Expanded Injection Well Area and associated infrastructure;

² Also referred to as the Advanced Water Treatment Facility (AWTF) in previous project documents.

³ The approved PWM/GWR Project also includes a drought reserve component to support crop irrigation during dry years. Under this component, an extra 200 AFY of purified recycled water will be injected in the Seaside Groundwater Basin during normal and wet years, up to a total of 1,000 AF, to create a “banked reserve.” During drought years, M1W will reduce the amount of water injected into the Seaside Groundwater Basin in order to increase production of recycled water for crop irrigation. CalAm will be able to extract the banked water in the Seaside Groundwater Basin to make up the difference to its supplies, such that its extractions and deliveries will not fall below 3,500 AFY.

⁴ See the description of the State Water Board Orders to reduce Carmel River diversions in Section 2.2.1, below. The State Water Resources Control Board’s Cease and Desist Order 95-10 required the reduction of CalAm pumping from the Carmel River; Order 2016-16 extended the time period for withdrawals above legal limits from the Carmel River through 2021.

⁵ M1W evaluated the environmental effects associated with these plant refinements in Addendum No. 3 to the PWM/GWR Project EIR.



CEQA-Approved PWM/GWR Project Facilities

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Figure
2-2

- ~~relocation of two previously approved Injection Well Sites and associated infrastructure to the Expanded Injection Well Area~~; and,
- relocation of one previously approved monitoring well⁶ to the area between the Expanded Injection Well Area and CalAm Extraction Wells (described below) located along General Jim Moore Boulevard.

For CalAm to extract additional groundwater injected by the Proposed Modifications into the Seaside Groundwater Basin, deliver it to meet its system demands at all times, and also provide system redundancy and reliability, the following CalAm potable water system improvements would be built and operated:

- four new Extraction Wells and associated infrastructure (e.g., treatment facilities, electrical buildings, etc.), including two new Extraction Wells located at Seaside Middle School, and two new Extraction Wells located off General Jim Moore Boulevard;⁷ and,
- CalAm Conveyance Facilities along General Jim Moore Boulevard and at the Seaside Middle School site.

2.1.1 Overview of Approved PWM/GWR Project

On October 8, 2015, the Board of Directors of M1W approved the PWM/GWR Project and certified the Final EIR (PWM/GWR EIR) (State Clearinghouse No. 2013051094). The approved PWM/GWR Project is the Proposed Project in the PWM/GWR Project Final EIR as modified to include the Alternative Monterey Pipeline and to select the RUWAP⁸ alignment for the product water conveyance system. The primary objective of the approved PWM/GWR Project is to replenish the Seaside Groundwater Basin with 3,500 AFY of purified recycled water to replace a portion of CalAm's water supply as required by State Water Resources Control Board orders. The originally approved PWM/GWR Project included a 4.0 mgd capacity Advanced Water Purification Facility for treatment and production of purified recycled water, which will subsequently be conveyed for injection into the Seaside Groundwater Basin. Injection facilities include a series of shallow and deep Injection Wells. The injected water will mix with the existing groundwater and be stored for urban use by CalAm, thus enabling a reduction in Carmel River system diversions by the same amount. CalAm will recover the groundwater at existing wells (indirect potable reuse). PWM/GWR Project product water conveyance facilities include ten miles of pipeline from the Advanced Water Purification Facility to Injection Wells in the Seaside Groundwater Basin.

In June 2016, MPWMD prepared an addendum to the PWM/GWR Project Final EIR. Addendum No. 1 to the PWM/GWR Project Final EIR considered the environmental effects associated with an amendment to CalAm's Water Distribution Permit to authorize the construction and operation of the Hilby Pump Station and the Monterey Pipeline. In February 2017, MPWMD prepared another addendum, Addendum No. 2, to the PWM/GWR Project Final EIR. Addendum No. 2,

⁶ To consider worst-case construction impacts in this Draft Supplemental EIR, M1W assumes that one new monitoring well would be constructed within 50 feet of one or more residences in the Fitch Park neighborhood.

⁷ The two new Extraction Wells located off General Jim Moore Boulevard are located at the same site as two of the aquifer storage and recovery (ASR) wells that were included in the MPWSP (ASR Wells 5 and 6). The potential environmental effects associated with the construction and operation of ASR Wells 5 and 6 are considered in the MPWSP EIR/EIS.

⁸ The RUWAP is a recycled water project developed by MCWD in cooperation with M1W. RUWAP was originally developed to help MCWD meet the overall needs of its service area, delivering tertiary-treated and disinfected recycled water produced at the existing Salinas Valley Reclamation Plant to urban users in the MCWD service area and former Fort Ord.

which was prepared to support another amendment to CalAm's Water Distribution System, evaluated the environmental effects of a minor realignment of a section of the Monterey Pipeline in the City of Monterey. Finally, in October 2017, M1W prepared Addendum No. 3 to the PWM/GWR Project Final EIR to expand the operational capacity of the approved Advanced Water Purification Facility and other system improvements.

On October 30, 2017, the M1W Board of Directors approved modifications to the PWM/GWR Project to increase the operational capacity (peak or maximum product water flowrate) of the approved Advanced Water Purification Facility from 4.0 mgd to 5.0 mgd to enable the delivery of 600 AFY of purified recycled water to MCWD for urban landscape irrigation by MCWD customers. The additional recycled water delivery is a component of the approved RUWAP, an urban recycled water project developed by MCWD. The source water for the October 2017 capacity expansion is entirely from MCWD's contractual rights to the return of its municipal wastewater in addition to a portion of M1W's summer water allocation per the Amended and Restated Water Recycling Agreement, which is described in more detail in **Section 2.6.1**. In April 2016 (amended in October 2017), M1W Board of Directors approved joint (shared) use of product water storage and conveyance facilities, including Blackhorse Reservoir, with MCWD for the RUWAP and the PWM/GWR Projects (PWM/GWR EIR Addendum No. 3).⁹

The approved PWM/GWR Project includes source water diversion sites, treatment facilities at the existing Regional Treatment Plant, product water conveyance facilities, Injection Well Facilities, and CalAm distribution facilities. The following section provides a more detailed description of each of these components. For further discussion, refer to Section 2.6 of the PWM/GWR Project Final EIR and Addenda.

The PWM/GWR Project Final EIR and associated Addenda, are hereafter referred to as the PWM/GWR Project Final EIR and are accessible online at <http://purewatermonterey.org/reports-docs/cfeir/>.

2.1.2 Overview of Approved PWM/GWR Project Components

The approved PWM/GWR Project consists of several distinct Project components. **Figure 2-2** includes a map of the previously approved PWM/GWR Project components. The approved components include Source Water Diversion and Storage Sites; Treatment Facilities at the Regional Treatment Plant; Product Water Conveyance; Injection Well Facilities; and, CalAm Distribution System Improvements as detailed below.

2.1.2.1 Source Water Diversion and Storage Sites

These facilities include source water diversion, conveyance, and storage facilities at Blanco Drain, Reclamation Ditch, the Salinas Pump Station, Salinas Industrial Wastewater Treatment Facility (SIWTF) and associated conveyance system.¹⁰ These facilities, which are nearing completion and which are anticipated to be operational in 2019, will enable new source waters to be diverted into the existing municipal wastewater collection system and to the Regional Treatment Plant to supplement the existing incoming wastewater flows.

⁹ The combined RUWAP-PWM conveyance system, also termed the Shared Product Water Conveyance Facilities, was also approved by MCWD in March 2016 (RUWAP Addendum No. 3).

¹⁰ The approved PWM/GWR project also includes source water diversion structures and pipelines that have not been funded or constructed, including at the western edge of Lake El Estero and at Tembladero Slough. The Tembladero Slough diversion is no longer being pursued as part of the PWM/GWR Project due to conditions imposed by the State Water Resources Control Board in water rights permits for the Blanco Drain and the Reclamation Ditch source water diversions.

2.1.2.2 Treatment Facilities at the Regional Treatment Plant

Improvements at the Regional Treatment Plant include the Advanced Water Purification Facility and pump station facilities to provide treatment and production of purified recycled water. The Advanced Water Purification Facility consists of a state-of-the-art treatment system that uses multiple membrane barriers to purify the water, product water stabilization to prevent pipe corrosion due to water purity, and a pump station.¹¹ As noted above, the operational peak capacity of the approved Advanced Water Purification Facility is 5.0 mgd. The water produced by the Advanced Water Purification Facility will meet or exceed Federal and State drinking water standards, including those set forth in Titles 17 and 22.

2.1.2.3 Product Water Conveyance

These facilities include the Product Water Conveyance Pipeline and Blackhorse Reservoir shared by the PWM/GWR and RUWAP projects and appurtenant facilities to transport the purified recycled water from the Advanced Water Purification Facility to the Seaside Groundwater Basin for injection.

2.1.2.4 Injection Well Facilities

The approved PWM/GWR Project includes subsurface groundwater recharge facilities. The approved PWM/GWR Project includes four Well Sites that each include one shallow or vadose zone well and one deep Injection Well.¹² In addition to the four Well Sites, four on-site monitoring wells located within the Seaside Groundwater Basin are part of the approved PWM/GWR Project. The approved facilities are shown on **Figure 2-2**, the Approved Injection Well Facilities Area.

Since the Final SEIR was completed in April 2020, M1W and MPWMD have begun construction of two additional deep injection wells. The first two vadose zone wells and the first two deep injection wells were completed in 2020 as part of the initial set of project improvements. The third deep injection well (DIW-3) is being constructed at the northernmost well site (called Well Site #1) and the fourth deep injection well (DIW-4) is being constructed at the southernmost well site (called Well Site #4). Both well sites are in the original Injection Well Facilities Area approved in 2015. No additional approved vadose zone wells are under construction; therefore, six of the eight approved wells will be operational within the next year. Because these two additional approved deep injection wells are now being built there is no longer a need to relocate them to the Expanded Well Area analyzed in the Supplemental EIR documents published in November 2019 (Draft Supplemental EIR) and in April 2020 (Final Supplemental EIR).

~~While the approved PWM/GWR Project included four Well Sites, only two of those Well Sites have been constructed to date. Final project design and project permitting revealed that only two Well Sites, each with one vadose zone well and one deep Injection Well, were necessary to achieve the average injections of 3,500 AFY and maximum of 3,700 AFY. As a result, M1W constructed only two of the approved Well Sites (identified as Well Sites #2 and #3 in the PWM/GWR Project Final EIR), although the PWM/GWR Project Final EIR evaluated the environmental effects associated with the construction and operation of four Well Sites.~~

¹¹ The approved PWM/GWR Project also includes a brine mixing structure and modifications to the Salinas Valley Reclamation Plant to improve delivery of recycled water to agricultural users; these components have not been funded to date.

¹² Vadose zone wells inject water into the unsaturated soils overlying the uppermost aquifer (the unconfined Paso Robles Aquifer), and deep Injection Wells inject into the confined Santa Margarita Aquifer.

2.1.2.5 CalAm Distribution System

Approved CalAm distribution facilities include the Monterey Pipeline and the Hilby Pump Station; these facilities convey water extracted from the Seaside Groundwater Basin to CalAm's customers on the Monterey Peninsula and during injection season they also convey Carmel River system water to the aquifer storage and recovery wells in the Seaside Groundwater Basin.

2.2 PROJECT BACKGROUND

The PWM/GWR Project Final EIR provides the background of the approved PWM/GWR Project (see Section 2.3 at pg. 2-6). That section addresses the requirements of the SWRCB orders affecting pumping from the Carmel River and of the court-ordered adjudication of Seaside Groundwater Basin; existing recycled water projects; and descriptions of key stakeholder agencies, including the project proponents. The following sections provides a brief updated discussion of project background.

2.2.1 SWRCB Orders to Reduce Carmel River Diversions

In 1995, the State Water Board issued Order ~~No.~~ WR 95-10, which found that CalAm was diverting more water from the Carmel River Basin (approx. 14,106 AFY) than it was legally entitled to divert (3,376 AFY). The State Board ordered CalAm to "diligently implement" actions to terminate its unlawful diversions from the Carmel River and to maximize use of the Seaside Groundwater Basin (to the extent feasible) to reduce diversions of Carmel River water. ~~In addition, In 2009, finding that CalAm's diversion reductions and development of new lawful water sources had "taken far too long" and were "too small to satisfy the requirement for diligence," the State Water Board issued a subsequent Cease and Desist Order (SWRCB Order Number WR 2009-0060) issued in 2009 requiring requiring CalAm to secure replacement water supplies for its Monterey District service area by January 2017 and reduce terminate its unlawful Carmel River diversions to 3,376 AFY no later than December 31, 2016.~~

"Subsequent to certification of the PWM/GWR Project Final EIR, in July 2016, the SWRCB State Water Board adopted Order WR 2016-0016, which amends Orders ~~95-10 and WR 2009-0060.~~ Order 2016-0016 and extends the date by which CalAm must terminate all unlawful diversions from the Carmel River from December 31, 2016 to December 31, 2021. The revised Cease and Desist Order ~~set~~ imposes additional conditions and a compliance schedule, including an initial "effective diversion limit" of 8,310 AFY for Water Year 2015-2016 (October 1, 2015 - September 30, 2016) and Order WR 2016-0016's compliance schedule also establishes annual milestones that CalAm must meet in order to maintain the 8,310 AFY diversion limit through 2021. The milestones, which CalAm has met to date, include specified construction progress on the MPWSP no later than September 30, 2020, additional specified construction progress on the MPWSP no later than September 30, 2021, and substantial completion of MPWSP to allow water deliveries no later than December 31, 2021. All volumes of GWR Project water delivered to CalAm result in an equivalent reduction of the effective diversion limit. After December 31, 2021, regardless of whether CalAm has achieved the earlier specified interim milestones, CalAm will be in violation of the State Water Board's cease and desist order if CalAm diverts any Carmel River water in excess of its actual water rights.

2.2.2 Relationship of Expanded PWM/GWR Project to MPWSP

The MPWSP consists of the construction and operation of a CalAm owned and operated 6.4 mgd desalination facility along with associated infrastructure (e.g., slant wells, conveyance pipelines, etc.). The CPUC certified the MPWSP EIR/EIS and approved the project on September 13, 2018 by Decision 18-09-017. In addition, the CPUC adopted settlement agreements and issued a Certificate of Public Convenience and Necessity (CPCN).

The Expanded PWM/GWR Project is proposed as a back-up to the MPWSP, not as an option or alternative to the MPWSP. It would be implemented in the event that CalAm is unable to feasibly implement the MPWSP in a timely fashion, in accordance with the State Board's Cease and Desist Order milestones, specifically, operation substantial completion of the MPWSP to allow water deliveries no later than desalination plant by December 31, 2021. The MPWSP and the Expanded PWM/GWR Project are both designed to provide the replacement water CalAm needs to comply with the Cease and Desist Order and with the Seaside Groundwater Basin Adjudication.¹³

Due to the potential for delays associated with MPWSP permitting, M1W and MPWMD are pursuing the Proposed Modifications as a back-up plan to the MPWSP. In the event that CalAm is unable to successfully implement the MPWSP in a timely fashion in accordance with the milestones identified by the State Board's Cease and Desist Order, the Expanded PWM/GWR Project would be implemented and CalAm would purchase 2,250 AFY from the proposed Expanded PWM/GWR Project to satisfy CalAm's obligations under the Cease and Desist Order.

2.3 LOCATION OF THE PROPOSED MODIFICATIONS

The Proposed Modifications would be located within northern Monterey County and would include expanded facilities located within unincorporated areas of Monterey County and the City of Seaside as shown in **Figure 2-3**. Specific locations for physical components of the Proposed Modifications are described later in this Chapter.

2.4 OBJECTIVES OF THE PROPOSED MODIFICATIONS

The primary objectives of the Proposed Modifications are to reduce discharges of secondary effluent to Monterey Bay and to replenish the Seaside Groundwater Basin with 2,250 AFY of additional purified recycled water to replace CalAm's use of existing water sources. To accomplish these primary objectives, the Proposed Modifications would need to meet the following objectives:

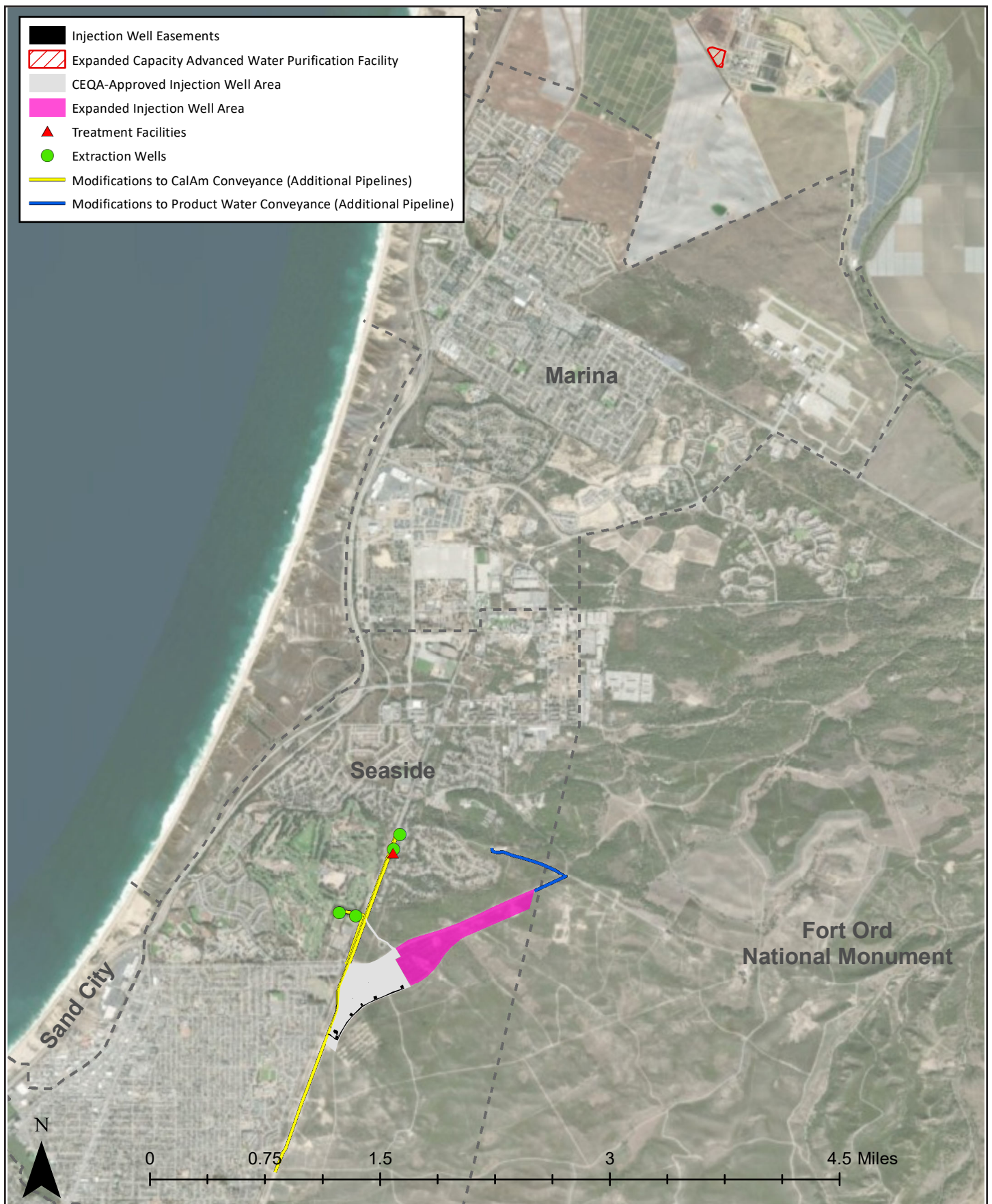
- Be capable of commencing operation, or of being substantially complete, by the end of 2021 or as necessary to meet CalAm's replacement water needs;
- Be cost-effective such that the Proposed Modifications would be capable of supplying reasonably-priced water; and

¹³ MPWMD staff ~~has~~ prepared updated water demand estimates, which are provided in **Appendix O** of this Final SEIR. ~~based on "available supplies and their ability to meet current and long-term demand...changing nature of demand on the Monterey Peninsula, the underlying assumptions in the sizing of the water supply portfolio, and indicators of the market's ability to absorb new demand" (MPWMD, March 13, 2020) Revisions to the water demand analysis were subsequently approved by the MPWMD on May 18, 2020 and again on February 25, 2021. The revisions do not change the environmental analysis (impacts and mitigation measures) nor the alternatives analysis in the Draft and Final Supplemental EIR. September 16, 2019), CalAm and other members of the public have contended that additional water supplies would be necessary to address future water demand (i.e., up to 14,400 AFY per CPUC CPCN Decision 18-09-017 and up to 12,948 AFY in 2035 per CalAm's 2015 Urban Water Management Plan). More information is provided in Chapter 5 of the Final SEIR and on the MPWMD website at www.mpwmd.net/water-supply/water-supply-overview/supply-and-demand-for-water-on-the-monterey-peninsula/.~~

- Be capable of complying with applicable water quality regulations intended to protect public health.

2.5 OVERVIEW OF EXISTING SYSTEMS

The PWM/GWR Project Final EIR (January 2016) includes an in-depth description of the existing wastewater and water infrastructure systems that are relevant to the approved PWM/GWR Project (see Section 2.5 at pg. 2-19). Section 2.5 describes M1W facilities including the Regional Treatment Plant, ocean outfall, wastewater collection systems, and stormwater collection systems. In addition, the section includes a description of the CalAm Facilities located in the Monterey District. For a detailed discussion of those facilities, please refer to the PWM/GWR Project Final EIR and Addenda, which are accessible online at <http://purewatermonterey.org/reports-docs/cfeir/>.



Proposed Modifications to PWM/GWR Project

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Figure
2-3

2.6 PROPOSED MODIFICATIONS TO PWM/GWR PROJECT

As discussed above, the Proposed Modifications would result in an Expanded PWM/GWR Project that would provide an additional 2,250 AFY of purified recycled water for injection into the Seaside Groundwater Basin and subsequent extraction. In order to provide an additional 2,250 AFY of treated water, the Proposed Modifications would require new and expanded project facilities, including improvements at the existing Advanced Water Purification Facility to increase peak capacity; additional product water conveyance facilities; additional Injection Well facilities, including the relocation of previously approved facilities into a new Injection Well area; additional monitoring wells, including the relocation of a previously approved monitoring well; and new potable water facilities consisting of four new Extraction Wells, related pipelines, and treatment facilities. The following section provides a more detailed discussion of each of these project components.

2.6.1 Source Water under Proposed Modifications

The Expanded PWM/GWR Project would recycle and reuse water from the same sources as the approved PWM/GWR Project. The Proposed Modifications would not change the maximum operations to divert, meter/monitor, and convey the following approved source waters to the Regional Treatment Plant as described and evaluated in the PWM/GWR Project Final EIR:

- Municipal Wastewater
- Salinas Agricultural Wash Water
- Salinas Stormwater
- Reclamation Ditch Surface Water
- Blanco Drain Surface Water
- Lake El Estero Surface Water

As the owner of the regional municipal wastewater collection and treatment system, M1W collects municipal wastewater from communities in northern Monterey County and treats it at its Regional Treatment Plant. Currently, most of that wastewater is recycled for crop irrigation in the dry season at an ~~onsite~~ tertiary treatment plant at the Regional Treatment Plant called the Salinas Valley Reclamation Plant. The tertiary-treated wastewater is delivered to growers through a conveyance and irrigation system called the Castroville Seawater Intrusion Project (CSIP). During wet periods, recycled wastewater is used only intermittently for crop irrigation. The wastewater that is not recycled ~~for crop irrigation~~ is treated to secondary effluent standards and discharged to the ocean through M1W's existing ocean outfall. In 2019, M1W began operating its Advanced Water Purification Facility that also uses secondary effluent as influent and produces purified recycled water for injection into the Seaside Groundwater Basin. Injection operations began in February 2020; although not currently occurring, purified recycled water is also planned to be used for urban irrigation within Marina Coast Water District's service area. The Proposed Modifications would enable more of the ~~municipal wastewater secondary effluent~~ to be recycled than is possible without the modifications; thus, less ~~municipal wastewater secondary effluent~~ would be discharged through the ocean outfall.

As under the approved PWM/GWR Project, the source water flows would be treated using the existing Regional Treatment Plant processes and then further treated and recycled by the Salinas Valley Reclamation Plant for agricultural irrigation or by the Advanced Water Purification Facility

for urban irrigation or for groundwater replenishment in the Seaside Basin to replace urban potable demands.

The Expanded PWM/GWR Project would, however, recycle more of the municipal wastewater and other new source waters that flow into the Regional Treatment Plant as compared to the approved PWM/GWR Project; thus, less municipal wastewater would be discharged through the ocean outfall. The Expanded PWM/GWR Project would increase the amount of municipal wastewater that is recycled at the Advanced Water Purification Facility at the Regional Treatment Plant for treatment/recycling throughout the year; however, the maximum diversions of each new source water and the maximum flows through the Regional Treatment Plant would not exceed the peak amounts described and analyzed in the PWM/GWR Project Final EIR.

With the Proposed Modifications, the ~~approved~~ PWM/GWR Project would continue to result in additional tertiary recycled water supply for agricultural irrigation in northern Salinas Valley, however approximately 700 to 800 AFY less water would be available for agricultural irrigation than was assumed in the calculations provided in ~~connection with the approved PWM/GWR Project~~ the Amended and Restated Water Recycling Agreement, see Section 2.6.1.1 of the Draft SEIR. Some of this identified reduction in future benefits for CSIP occurred due to Marina Coast Water District's use of its rights to the municipal wastewater for urban irrigation (approved with PWM/GWR Project changes in October 2017) and some yield reduction occurred due to the Settlement Agreements with the National Marine Fisheries Service and with California Department of Fish and Wildlife, which resolved protests on the Blanco Drain and Reclamation Ditch diversion water rights permits. Some of The remainder of this reduction in future increases in tertiary recycled water for agricultural irrigation compared to the amount of water anticipated to be available under the approved PWM/GWR Project is due to M1W's proposal to recycle more of the municipal wastewater to which it is entitled to recycle under its existing water rights under Water Code section 1210 and existing contracts and local agency agreements (described below in section 2.6.1.1). Additional analyses of source water availability and use have been prepared and included in this Final SEIR (see Appendix M) to show that M1W would still hold legal rights to use secondary treated effluent in adequate volumes to meet the yield objectives of the Proposed Modifications even if one of the following future scenarios occurs:

- conditions precedent in section 16.15 of the ARWRA are not completed, or
- new source waters in Blanco Drain and Reclamation Ditch are not available for use by M1W for the Proposed Modifications.

"Currently, the only sources of supply for the existing tertiary recycled water facility are municipal wastewater from within the M1W 2001 service area, half of the municipal wastewaters that flow into the M1W system from outside of the 2001 service area, less rights to those waters given to M1W and Marina Coast Water District, and small amounts of urban dry weather runoff from the City of Pacific Grove. Municipal wastewater flows have declined in recent years due to aggressive water conservation efforts by the M1W member entities. With the approved PWM/GWR Project, the quantity of source waters entering the existing wastewater collection system is expected to be increased such that additional tertiary recycled water still can be provided for use in the CSIP's agricultural irrigation system. The PWM/GWR Project Final EIR estimated that additional source waters could provide 4,500 to 4,750 AFY of additional recycled water supply, in normal and wet years, for CSIP irrigation purposes. In order to produce enough recycled water to meet the yield objectives of the Proposed Modifications, additional wastewater, to which M1W has the rights to use (as described below), will be diverted to the Advanced Water Purification Facility. This in turn will reduce the amount of wastewater available for use as agricultural irrigation by 700 to 800 AFY compared to the amount anticipated for the approved PWM/GWR Project. The following table summarizes the estimates of total CSIP benefits of the PWM/GWR Project that have been provided to date. The table also identifies the reduction in future CSIP benefits after

implementation of the Proposed Modifications based on the most recent analysis by Schaaf & Wheeler in Appendix I of the Draft SEIR:

Table 5-A: Estimated PWM/GWR Project CSIP Augmentation after Previous M1W Board Actions and Proposed Modifications

	Normal Year	Drought Year
PWM/GWR Project Final EIR (2015) <i>without CSIP and SVRP system constraints</i>	5,460 AFY	5,728 AFY
PWM/GWR Project Final EIR (2015) <i>with conservative assumptions of CSIP and SVRP system constraints</i>	Up to 4,500 to 4,700 AFY	
Assumed CSIP yield in Amended and Restated Water Recycling Agreement section 4.02(1)	4,381 AFY	
PWM/GWR Project EIR Addendum No. 3 (2017) <i>with MCWD RUWAP Phase 1 & without the CSIP and SVRP system constraints</i>	4,970 AFY	5,150 AFY
Settlement Agreement with NMFS & CDFW for Blanco Drain & Reclamation Ditch Diversion Water Rights Permits (2018)	4,250 AFY	2,870 AFY
PWM/GWR Project with Proposed Modifications	3,600 AFY	2,858 AFY
<i>Note: These numbers assume: (1) wastewater and surface water flows per Schaaf & Wheeler (October 2015, October 2017 and November 2019); (2) MCWRA participates in funding capital, operation, maintenance/repair, and replacement, costs of new source water facilities; (3) SVRP modifications are completed, and (4) drought-reserve is available.</i>		

Additional information about the CSIP yields presented above is provided in Chapter 3, under Master Response #3.

2.6.1.1 Amended and Restated Water Recycling Agreement

After certification of the PWM/GWR EIR, in November 2015, M1W and the MCWRA signed an agreement titled the Amended and Restated Water Recycling Agreement (ARWRA), which addresses rights to use source waters from the Blanco Drain, Reclamation Ditch and the City of Salinas (produce wash water) for CSIP and the PWM/GWR Project. The ARWRA was developed by combining provisions of (i) the M1W agreement with MCWRA, dated June 15, 1992, for construction and operation of a tertiary treatment system (the “1992 Agreement”), with subsequent amendments thereto, as follows: Amendment No. 1 on May 30, 1994; Amendment No. 2 on February 16, 1998; and Amendment No. 3 on May 28, 2002, (ii) agreement between M1W and MCWRA entitled “Operation and Maintenance of the Salinas River Diversion Facility,” dated February 3, 2011 (SRDF Agreement) and, (iii) the Source Waters MOU.

The ARWRA Section IV., Provision of Recycled Water to WRA {*Water Resources Agency*} from PCA, section 4.01 (Existing Allocations) states:

“1. WRA {Water Resources Agency} shall be entitled to tertiary treated recycled water for its CSIP Project during the agricultural growing season in a volume not less than total wastewater flows to the Regional Treatment Plant from all PCA (M1W) members existing

at the Effective Date of this Water Recycling Agreement, plus all other areas within PCA's 2001 boundaries less the following amounts (may be taken before tertiary treatment):

- (a) Amount claimed and utilized by MCWD pursuant to Section 15.04 as provided pursuant to the Annexation Agreements.
- (b) Such flows as are lost or as must be diverted in the ordinary course of operating and maintaining the treatment plant and ocean outfall.
- (c) Such flows as are not needed to meet WRA's authorized demand pursuant to this Water Recycling Agreement.
- (d) 650 AF of water allocated by WRA to PCA per Table 2:

Table 2	
Month	Typical Monthly Seasonal Spread (AF)
May	138
June	172
July	185
August	155
Total	650

2. WRA shall be entitled to one-half of the volume of wastewater flows from areas outside of PCA's 2001 Boundary provided; however, at the request of WRA, PCA passes the wastewater flows through the tertiary treatment facility or Pure Water Monterey Facilities..."

Several flows that are treated at the Regional Treatment Plant are considered to ~~be come from~~ out of the 2001 M1W Service Area, and/or originate from on-site or near the Regional Treatment Plant, and thus, pursuant to the ARWRA section 4.01(2), rights to these wastewater flows would be ~~evenly~~ divided between M1W and MCWRA, including

- Backwash flows from the Salinas River Diversion Facility screening process (totaling up to approximately 200 AFY, when the facility is operating and limited to April through September).
- Filter backwashing flows from the mixed media filters at the Salinas Valley Reclamation Plant (totaling approximately ~~2,000~~1,800 AFY peaking in the summer months).
- Advanced Water Purification Facility filter backwash and clean in place flows (approximately 900 AFY spread evenly throughout the year).
- Local Waste Recycled Sumps #1 and #2 flows (previously referred to as Recycled Sump #1 and #2) that treat wastewaters generated on-site and at the adjacent landfill (approximately 300 AFY).
- Several areas in and around the City of Salinas and the community of Castroville (currently only the western annexation of the Boronda area constitute substantive flows with those total approximately 200 AFY evenly spread throughout the year).

Total water rights to these wastewater flows at the Regional Treatment Plant available to each, M1W and MCWRA, would range from 1,700 to 1,900 AFY depending upon flows of these waters, in particular, whether or not the SRDF is operating.

Portions of the ARWRA applicable to the New Source Water Facilities and to requirements for M1W to finance, design and construct certain source waters will not become effective until the following conditions are met per Section XVI General Provisions, section 16.15 (Conditions Precedent for New Source Water Facilities of the ARWRA:

- “1. Water Rights for the Blanco Drain and Reclamation Ditch are obtained from the California State Water Resources Control Board; and,*
- 2. A fully executed, and California Public Utilities Commission (CPUC) approved, Water Purchase Agreement, between MRWPCA, MPWMD, and California-American Water, is approved by the CPUC and executed by the parties thereto; and,*
- 3. Written finding by the Regional Water Quality Control Board that utilization of the Blanco Drain dry weather flows as New Source Water meets all treatment requirements for the aforesaid dry weather flows; and,*
- 4. An independent third-party review of proposed capital and operating costs and preparation of an Engineer’s Report is approved by the Water Resources Agency Board of Directors and Board of Supervisors. The costs of the aforesaid third-party review shall be shared equally between Water Resources Agency and MRWPCA; and,*
- 5. A successful assessment or Proposition 218 process for rates and charges related to the operation and maintenance of the New Source Water Facilities and proportional primary and secondary treatment charges; and,*
- 6. Inclusion of Salinas Pond Water Return Facilities as New Source Water Facilities requires execution of a separate agreement between the Parties.”*

Due to delays in completing the cost-based Engineers Report (Condition 4 above), and changes in MCWRA personnel, the conditions 3, 4, 5, and 6 above have not been completed as of preparation of this Draft Supplemental EIR. In June 2019, the MCWRA and M1W developed an amendment to the ARWRA that allows additional time to address the conditions precedent, delays payments by the MCWRA, and allows M1W to use source waters for the PWM/GWR Project until such time as the conditions are met. The M1W Board and the MCWRA Board of Directors and Monterey County Board of Supervisors unanimously approved Amendment No. 1 at their June 2019 meetings.

For this Draft Supplemental EIR, M1W assumes the following:

- 1) The conditions precedent (Items 4, 5, and 6) would be met *prior* to commencement of operation of the Expanded PWM/GWR Project,
- 2) An amendment to the ARWRA will be approved, if needed, taking into consideration the Proposed Modifications and progress and results of completion of conditions precedent in ARWRA section 16.15, and
- 3) the Expanded PWM/GWR Project would be implemented in accordance with the existing, or if needed, an amended agreement.

A revised source water rights memorandum has been prepared (previously Appendix C – revised in the PWM/GWR Project Final EIR) and is included in this Supplemental EIR as **Appendix B**.

In addition, to the above agreements, M1W has entered into an agreement with the City of Salinas to utilize agricultural wash water (Salinas industrial wastewater) for recycling through the SVRP for CSIP and for use by the approved PWM/GWR Project for groundwater replenishment in the Seaside Groundwater Basin. That agreement is provided in **Appendix C**. In the event that the conditions precedent in ARWRA section 16.15 are not met, section 16.16 states MCWRA “will retain the right to utilize the Agricultural Wash Water component from the City of Salinas.”

As described above, ARWRA, section 4.01 designates water rights to wastewater flows originating from outside of M1W's 2001 service area as equally split between M1W and MCWRA. The M1W Regional Treatment Plant and surrounding land, including the Monterey Regional Waste Management District land, are located outside of M1W's 2001 boundaries; thus, [M1W assumes](#) section 4.01 applies to wastewaters originating from these areas. [An amendment to the ARWRA is currently being negotiated which could change section 4.01 to change the allocation to some of the wastewater flows described above. The proposed amendment terms were discussed at the March 2021 Recycled Water Committee and Board meetings. M1W staff has analyzed the proposed changes to source water allocation in section 4.01 and has confirmed found that the proposed re-are no other changes would not result in other changes to the project description nor to the conclusions related to environmental impacts and mitigation measures, nor alternatives in the SEIR.](#) This section will remain in effect whether or not conditions precedent in ARWRA section 16.15 are met, because Section 4.01 is not applicable to New Source Waters.

The Proposed Modifications would not change the construction aspects or maximum use of any of the approved PWM/GWR source water facilities.

2.6.1.2 New Source Water Supply Study

"In 2017, MCWRA and M1W contracted with Raftelis Financial Consultants, Inc. (Raftelis) to conduct a New Source Waters Study (Study). The purpose of the Study (see page 8) was:

"to provide a cost analysis for the operation, maintenance, and capital costs for New Source Water Facilities to determine specific rates and charges for final consideration. Through discussions with MCWRA the new source waters evaluated in this Study were narrowed to Blanco Drain and Reclamation Ditch, including existing source waters of treated wastewater, supplemental wells and IWW. The Salinas Pond Water Return Facilities will be considered independently and are discussed in Section 9 of this report. This report includes capital, operations, maintenance, and repair and replacement costs associated with developing New Source Water Facilities and provides incremental costs for CSIP operations under four different scenarios developed by MCWRA and M1W based on climate conditions and water rights for each water supply."

"This report did not describe or evaluate environmental impacts, mitigation measures, nor alternatives related to the approved PWM/GWR Project nor related to the Proposed Modifications and only provided estimates of the volumes and cost of capital and operations and maintenance of three of the new source waters; therefore, does not change or add to the environmental impact analysis of the SEIR. As described in comment H-3 and H-10, the Raftelis Study found that CSIP would receive 2,300 AFY of the three new source waters identified above based on the Raftelis assumptions. That report did not consider the volumes or associated costs for the diversion and use of other new source waters (Lake El Estero, Ag Wash Water, Salinas Storm Water, and treated Ag Wash Water mixed with storm water from the Salinas Industrial Wastewater Percolation Ponds); it also separately addressed the CSIP yield from the Salinas Valley Reclamation Plant winter modifications. The changes to CSIP yield identified in the prior section assume implementation of the other new source waters (except Tembladero Slough) and the SVRP winter modifications."

2.6.2 Modifications to the Advanced Water Purification Facility

The Expanded PWM/GWR Project would expand the capacity of the Advanced Water Purification Facility from 5.0 mgd to 7.6 mgd. Expanding the Advanced Water Purification Facility to produce

up to 7.6 mgd will require installation of additional treatment and pumping equipment, chemical storage, pipelines and facility appurtenances within the 3.5-acre existing building area. The Advanced Water Purification Facility would be modified by installing additional equipment in the locations designated and shown in the current Advanced Water Purification Facility site plan drawings as shown on **Figure 2-4**. The additional equipment, piping and electrical/instrumentation that would be installed at the site within each major facility sub-component are summarized below. Items identified as optional equipment would provide additional system redundancy but would not be required to achieve the production rate of 7.6 mgd. For this Draft Supplemental EIR, all of the analyses assume that the optional components would be installed, but that they would operate only if the other like process equipment were not operating for an extended period of time.

Added Source Water Pump Station Equipment

- One duty source water pump and associated piping and valves
- One variable frequency drive and associated electrical and instrumentation

Added Ozone System Equipment

- One liquid oxygen (LOX) storage tank (optional)
- One standby LOX vaporizer (optional)
- Two ozone injection skids (one required and one optional)
- One ozone destruct unit (optional)
- Associated piping, electrical and instrumentation

Added Membrane Filtration (MF) System Equipment

- One duty MF feed pump
- One duty MF unit
- Associated piping, VFDs, electrical and instrumentation

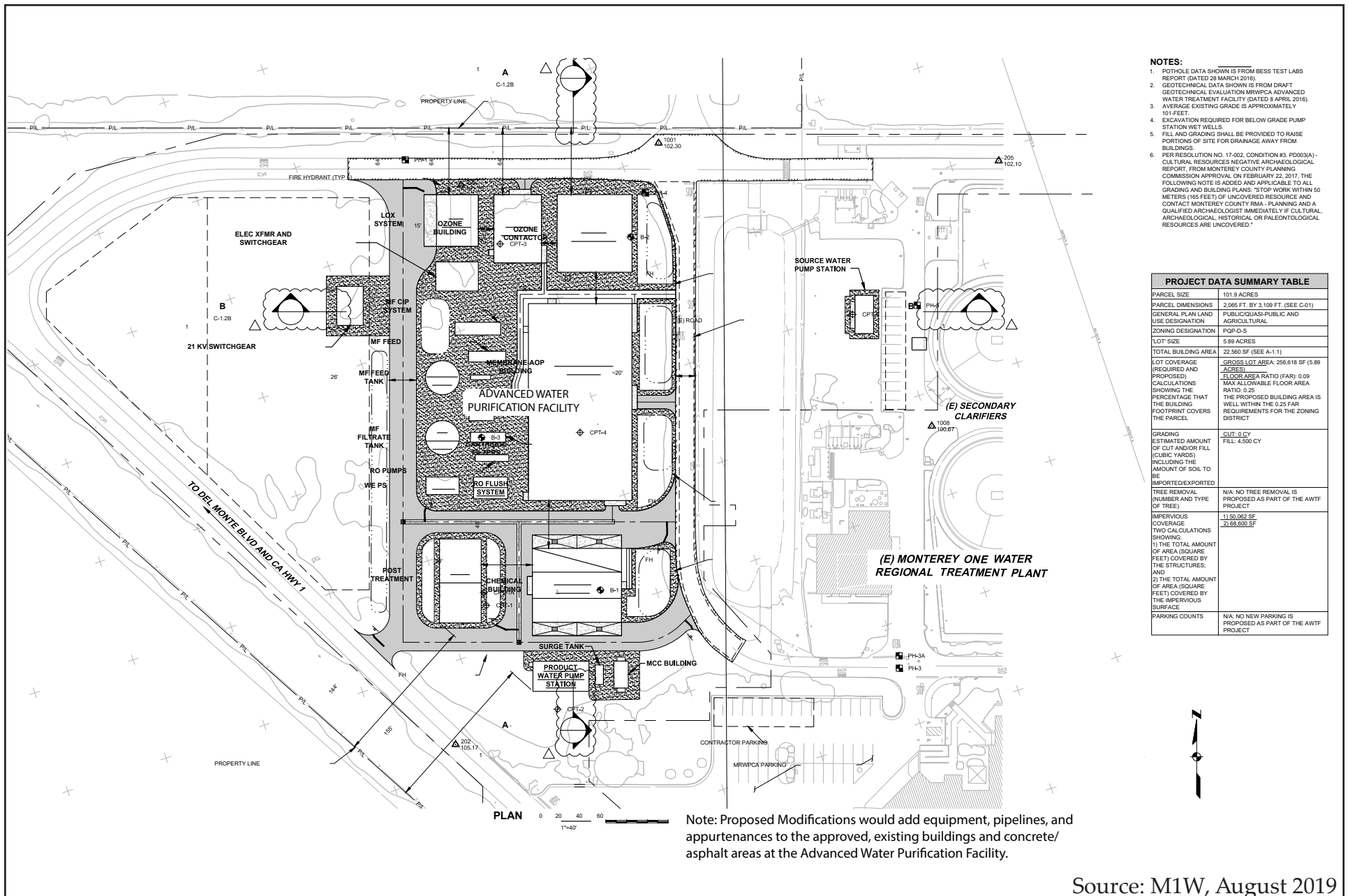
Added Reverse Osmosis (RO) System Equipment

- One duty RO transfer pump
- One duty RO feed pump
- One large (2.02 mgd) RO train¹⁴
- Associated piping, VFDs, electrical and instrumentation

Added Ultraviolet Light and Advanced Oxidation Process System Equipment

- One duty ultraviolet light reactor (for a total of 6 duty reactors + 1 Standby)
- Associated piping, power supply, electrical and instrumentation

¹⁴ The RO unit is anticipated to be six-vessels-tall instead of five-vessels-tall, resulting in the potential need for an additional mobile hydraulic man lift at the site.



- NOTES:**
1. POT HOLE DATA SHOWN IS FROM BESS TEST LABS REPORT (DATED 28 MARCH 2016).
 2. GEOTECHNICAL DATA SHOWN IS FROM DRAFT GEOTECHNICAL EVALUATION MRWPCA ADVANCED WATER TREATMENT FACILITY (DATED 8 APRIL 2016).
 3. AVERAGE EXISTING GRADE IS APPROXIMATELY 101 FEET.
 4. EXCAVATION REQUIRED FOR BELOW GRADE PUMP STATION WET WELLS.
 5. FILL AND GRADING SHALL BE PROVIDED TO RAISE PORTIONS OF SITE FOR DRAINAGE AWAY FROM BUILDINGS.
 6. PER RESOLUTION NO. 17-002, CONDITION #3, P0003(A) - CULTURAL RESOURCES NEGATIVE ARCHAEOLOGICAL REPORT, FROM MONTEREY COUNTY PLANNING COMMISSION APPROVAL ON FEBRUARY 22, 2017, THE FOLLOWING NOTE IS ADDED AND APPLICABLE TO ALL GRADING AND BUILDING PLANS: "STOP WORK WITHIN 50 METERS (165 FEET) OF UNCOVERED RESOURCE AND CONTACT MONTEREY COUNTY RMA - PLANNING AND A QUALIFIED ARCHAEOLOGIST IMMEDIATELY IF CULTURAL ARCHAEOLOGICAL, HISTORICAL OR PALEONTOLOGICAL RESOURCES ARE UNCOVERED."

PROJECT DATA SUMMARY TABLE	
PARCEL SIZE	101.9 ACRES
PARCEL DIMENSIONS	2,065 FT. BY 3,109 FT. (SEE C-01)
GENERAL PLAN LAND USE DESIGNATION	PUBLIC/QUASI-PUBLIC AND AGRICULTURAL
ZONING DESIGNATION	PQP-D-S
LOT SIZE	5.89 ACRES
TOTAL BUILDING AREA	22,560 SF (SEE A-1.1)
LOT COVERAGE (REQUIRED AND PROPOSED)	LOT COVERAGE: 256,618 SF (5.89 ACRES)
FLOOR AREA RATIO (FAR): 0.09	
MAX ALLOWABLE FLOOR AREA RATIO: 0.25	
THE PROPOSED BUILDING AREA IS WELL WITHIN THE 0.25 FAR REQUIREMENTS FOR THE ZONING DISTRICT	
GRADING ESTIMATED AMOUNT OF CUT AND/OR FILL (CUBIC YARDS) INCLUDING THE AMOUNT OF SOIL TO BE IMPORTED/EXPORTED	CUT: 0 CY FILL: 4,500 CY
TREE REMOVAL (NUMBER AND TYPE OF TREE)	N/A: NO TREE REMOVAL IS PROPOSED AS PART OF THE AWWTF PROJECT
IMPERVIOUS COVERAGE TWO CALCULATIONS SHOWING: 1) THE TOTAL AMOUNT OF AREA (SQUARE FEET) COVERED BY THE STRUCTURES; AND 2) THE TOTAL AMOUNT OF AREA (SQUARE FEET) COVERED BY THE IMPERVIOUS SURFACE	1) 11,501,022 SF 2) 21,88,600 SF
PARKING COUNTS	N/A: NO NEW PARKING IS PROPOSED AS PART OF THE AWWTF PROJECT

Advanced Water Purification Facility Site Plan

November 2019

Expanded PWM/GWR Project
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Figure
2-4

Added Waste Collection System Equipment

- One duty waste transfer pump
- Associated piping, VFD, electrical and instrumentation

Added Product Water Pump Station Equipment

- Replacement of up to two of the existing pump impellers and addition of one duty product water pump and motor
- Associated piping, VFD, electrical and instrumentation

The approved Advanced Water Purification Facility is fed electricity from a 21kV switchgear that feeds two transformers that power additional switchgear. Additional loads associated with the operation of the equipment needed for the Proposed Modifications yields may result in the need to replace or add one or more pieces of switchgear equipment.

No changes would be needed to the stabilization process at the approved Advanced Water Purification Facility. No changes are expected for chemical storage, although chemical deliveries may be more frequent. No additional grading/excavation and no addition of buildings would be required. Some areas of asphalt and/or landscaping may be converted to concrete pads on which covered or uncovered equipment, tanks, and electrical cabinets may be placed.

Construction

Construction workers would access the existing Advanced Water Purification Facility site via Charles Benson Road and existing access roads serving the existing treatment plant. Construction activities would include cutting, laying, and welding pipelines and pipe connections; pouring concrete footings for foundations, tanks, and other support equipment; installing piping, pumps, storage tanks, and electrical equipment; and testing and commissioning facilities. Construction equipment would include excavators, backhoes, graders, pavers, rollers, bulldozers, concrete trucks, flatbed trucks, boom trucks and/or cranes, forklifts, welding equipment, dump trucks, air compressors, and generators. Mechanical components of the ozone pretreatment, membrane filtration systems, reverse osmosis, advanced oxidation, and post-treatment facilities would be prefabricated and delivered to the site for installation. All construction and staging areas would be within the existing 3.5-acre site. Construction activities related to the modifications to the Advanced Water Purification Facilities are expected to occur over ten months.

Operation and Maintenance

Regional Treatment Plant secondary effluent would be drawn into the Advanced Water Purification Facility from the existing secondary effluent conveyance system to a pump station at the Advanced Water Purification Facility. Pumping facilities operate remotely by M1W's SCADA system. The Advanced Water Purification Facility would operate at an overall water recovery rate of 81 percent.¹⁵ The proposed expanded Advanced Water Purification Facility would have a design capacity of 7.6 mgd of product water. The facility would be operated to produce up to 5,950 AFY of purified recycled water for injection and 600 AFY of purified recycled water to MCWD for urban landscape irrigation, which equates to an annual average production rate of 5.8 mgd (6,550 AFY). The 7.6 mgd facility size is required to allow for peak seasonal operation and system down time. The system components must be sized to allow for losses during treatment such as

¹⁵ This recovery rate does not include losses due to the filter backwash flows routed through the Regional Treatment Plant, as these flows would be recycled through the plant and return as source water, thus not decreasing the system recovery. Of the total Regional Treatment Plant influent that becomes Advanced Water Purification Facility influent, 81 percent becomes product water and 19 percent becomes reject water as reverse osmosis concentrate.

backwashing and concentrate disposal. Cleaning wastes from each system would be neutralized and returned to the Regional Treatment Plant headworks, along with backwash waste residuals from the membrane treatment system. Reverse osmosis concentrate would be discharged to the existing Regional Treatment Plant ocean outfall. The expanded Advanced Water Purification Facility would produce 5,750 AFY on average for injection, plus up to an additional 200 AFY for drought or operational reserve injections in most years. In addition, up to 600 AFY could be produced to supply Marina Coast Water District customer irrigation demands. The average annual RO feed supply for all the potential demands would be 7,839 AFY with a maximum of 8,087 AFY. The RO system would produce waste byproduct (RO concentrate) of an average of 1,489 AFY for all potential demands with a maximum of 1,537 AFY.

Table 2-1 Expanded AWPf Typical Monthly Flow Volumes, shows an example of the proposed seasonality of flow and production. Although the data is presented here as a single set of flows by month, actual system operation would require daily or weekly management of the production rates to address the variability in irrigation demands and supply availability. Source water diversions would be similarly managed to maximize water availability for all irrigation users during the peak irrigation season. For example, with peak MCWD and SVRP demands, AWPf source water influent in some months could be as low as 259 AF per month, with increased yield being delivered in October through March each year.

Table 2-1

Expanded Advanced Water Purification Facility – Typical Monthly Flow Volumes (AF)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Total
<u>AWPF Influent Source Waters</u>	648	634	610	888	859	888	888	802	888	598	645	628	8,975
Membrane Filtration Feed	635	622	597	870	842	870	870	786	870	586	633	615	8,795
Reverse Osmosis Feed	584	572	550	800	774	800	800	723	800	539	582	566	8,091
Purified Recycled Water	473	463	445	648	627	648	648	585	648	437	471	459	6,554

A summary of the expanded Advanced Water Purification Facility design flows are provided in **Table 2-2, below.**

Table 2-2

Expanded Advanced Water Purification Facility Design Summary

Component	Design Capacity (See Note a)
Secondary Effluent Diversion Structure, Source Water (Advanced Water Purification Facility Influent) Pump Station, and Chloramine Feed System	10.4 mgd
Ozone System	10.4 mgd
Membrane Filtration System	10.4 mgd
Reverse Osmosis System	9.3 mgd
Advanced Oxidation System, Product Water Stabilization and Product Water Pump Station	7.57 mgd
Notes:	
a. Capacities represent process feedwater maximum flow rates.	

The expanded Advanced Water Purification Facility would be able to produce water at up to 90% of design capacity, on average, due to some anticipated down time for membrane “clean in place” practices and repairs. The down time is assumed to be evenly distributed each month, though planned events would be scheduled for times when the least source water is available. The annual average production would be significantly lower (5.8 mgd) because M1W will only operate at the peak production when secondary effluent volumes exceed base project and CSIP demands (typically, November through March). The resulting flow quantities for the expanded Advanced Water Purification Facility are shown in **Table 2-3, Expanded Advanced Water Purification Facility Process Design Flow Assumptions** below.

Table 2-3

Expanded Advanced Water Purification Facility Process Design Flow Assumptions

	Annual Flows¹	Average Flow Conditions¹	Maximum Flow Conditions²
AWT Facility Process	AFY	mgd	mgd
Source Water Pump Station and Ozone System Feed	8,985	8.0	10.4
Membrane Filtration Feed	8,985	8.0	10.4
Membrane Filtration Backwash returned to Regional Treatment Plant Headworks	898	0.8	1.0
Reverse Osmosis Feed	8,086	7.2	9.3
Reverse Osmosis Concentrate	1,536	1.4	1.8
Reverse Osmosis Product Water (Advanced Water Purification Facility Design Size)	6,550	5.8	7.57
Advanced Oxidation Process, Product Water Stabilization, and Product Water Pump Station	6,550	5.8	7.57
Notes:			
¹ Average annual flows reflect 6,550 AFY, typical annual production while building an operational or drought reserve.			
² Maximum flow condition reflects design peak production rate.			

No changes to the operational vehicle trips and employees would occur (see Table 2-10 of the PWM/GWR Project Final EIR). Operational electricity demands are discussed later in this chapter (see **Section 2.6**).

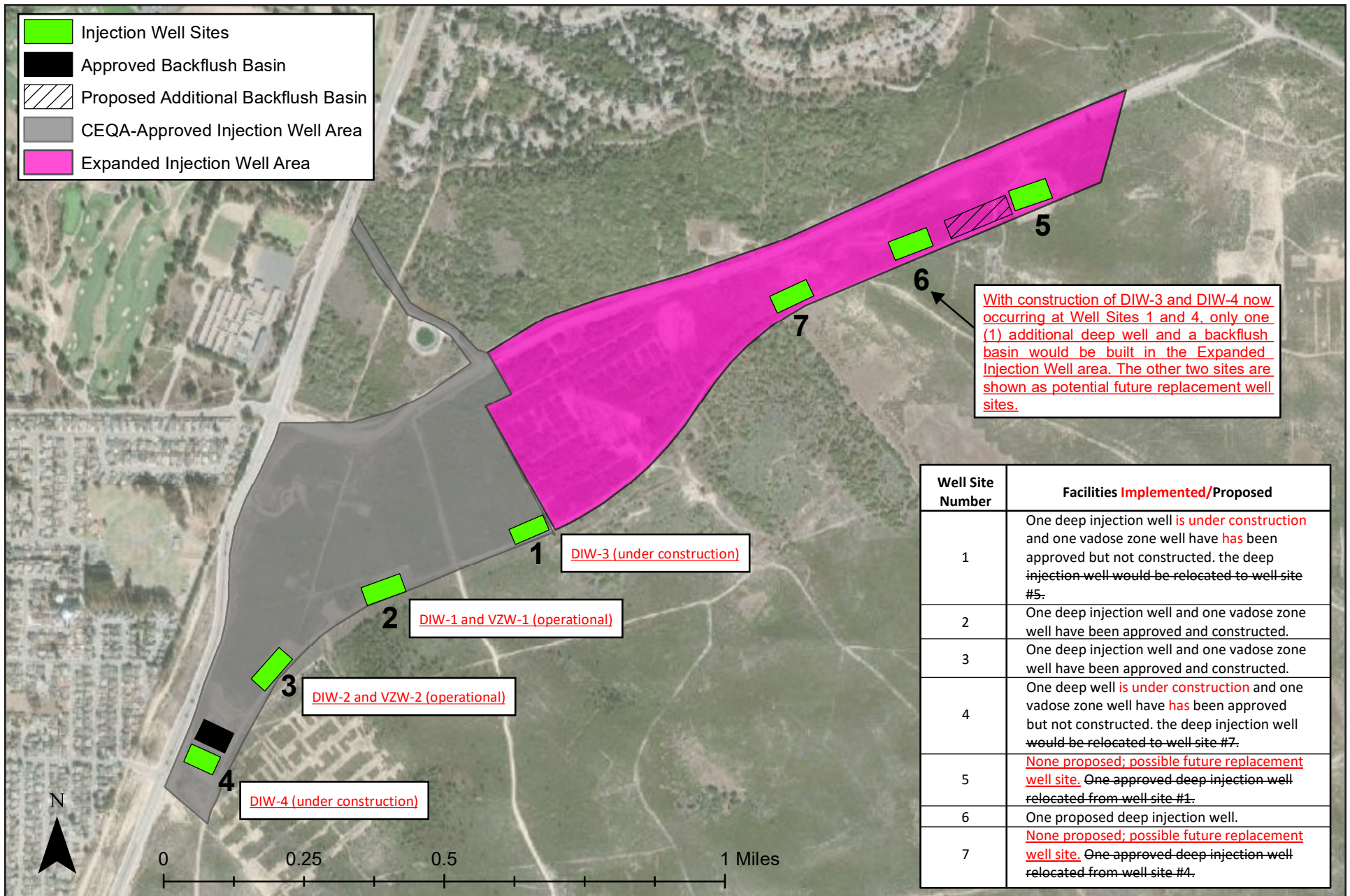
2.6.3 Modifications to Product Water Conveyance

The Proposed Modifications include the construction of a new product water conveyance pipeline extending from the existing Blackhorse Reservoir to the Expanded Injection Well Area. See **Figure 2-35** for more detail. The northern part of the pipeline would be located within an existing private dirt road, which is maintained by MCWD. The southern portion of the pipeline would be located within the existing paved area of Eucalyptus Road. Eucalyptus Road is closed to vehicles; however, it is frequently used by recreational users. In total, the pipeline would be approximately 1 mile to the first Injection Well (at Well Site #5) and an additional 2,000 feet from Well Site #5 to Well Site #7. The pipeline would be a maximum of 30 inches in diameter. An additional 2,000 feet of pipeline for backflushing wells also be located generally along the same alignment as the product water pipeline between Well Site #5 and Well Site #7.

The existing product water pump station at the M1W Regional Treatment Plant would need to be upgraded, as described above in **Section 2.6.2**, in order to efficiently convey water produced at the Advanced Water Purification Facility to the new portion of the Product Water Conveyance Pipeline described above.

The Blackhorse Reservoir and the conveyance pipeline from this reservoir site to the injection wellfield are owned by MCWD and jointly used for the approved PWM/GWR Project. See Figure 2-5A at the end of this chapter for a detailed depiction of the pipeline connection to the lateral pipeline feeding the Blackhorse Reservoir. The existing product water conveyance pipeline from the Product Water Pump Station to the Blackhorse Reservoir is sufficiently sized to handle the increased total flow rate of 7.6 mgd (an increase of 2.6 mgd above the approved PWM/GWR Project maximum flow rate) in addition to water for foreseeable RUWAP irrigation needs. The peak velocity in the pipeline would be approximately 4 ft/s (Kennedy-Jenks, 2020).

The pipeline to the Expanded Injection wellfield would branch off the Blackhorse Reservoir lateral near the tank. The MCWD Recycled Water Master Plan identifies the need for a future distribution lateral from the tank site to the corner of Eucalyptus Road and Parker Flats Cut-Off. However, this connection is outside the scope of the Proposed Modifications and this SEIR.



CEQA-Approved and Expanded Injection Well Area

November 2019 Revised March, 5 2021

Expanded PWM/GWR Project
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Figure
2-5

The 2 million gallon capacity Blackhorse Reservoir provides operational storage for the conveyance and injection requirements of the approved PWM/GWR Project and the Proposed Modifications in addition to the RUWAP irrigation demands and can accommodate the backwashing cycles for all approved and proposed deep injection wells (Kennedy-Jenks, 2020).

Construction

The product water conveyance pipeline would be constructed using open trench methods. The construction sequence would typically include clearing and grading the ground surface along the pipeline alignment; excavating the trench; shoring, if required; preparing and installing pipeline sections; installing vaults, manhole risers, manifolds, and other pipeline components; backfilling the trench with non-expansive fills; restoring preconstruction contours; and revegetating or paving the pipeline alignments, as appropriate. A conventional backhoe, excavator, or other mechanized equipment would be used to excavate trenches. The typical trench width would be six feet; however, vaults, manhole risers, and other pipeline components could require wider excavations. In addition, the project construction area is underlain by sandy soils that may require a laid-back trench cross-section due to considerations such as duration of construction, efficiency, and safety. In these cases, trench widths may be up to 12 feet wide. Work crews would install trench boxes or shoring or would lay back and bench the slopes to stabilize the pipeline trenches and prevent the walls from collapsing during construction. After excavating the trenches, the contractor would line the trench with pipe bedding (sand or other appropriate material shaped to support the pipeline). Construction workers would then place pipe sections (and pipeline components, where applicable) into the trench, connect the sections together by welding or other applicable joining methods as trenching proceeds, and then backfill the trench. Most pipeline segments would have four to five feet of cover. Open-trench construction would generally proceed at a rate of about 150 to 250 feet per day. Steel plates would be placed over trenches to maintain access during construction.

Operation and Maintenance

The proposed product water conveyance pipeline could operate continuously for up to 24 hours a day. General operations and maintenance activities associated with pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when necessary; inspection of valve vaults for leakage; testing, exercising and servicing of valves; vegetation maintenance along rights-of-way; and repairs of minor leaks in buried pipeline joints or segments.

No changes to the operational vehicle trips and employees would occur (see Table 2-10 of the PWM/GWR Project Final EIR). Operational electricity demands are discussed later in this chapter (see **Section 2.6**).

2.6.4 Modifications to Injection Well Facilities

~~As noted previously above, the approved PWM/GWR Project included four Well Sites; however, only two of the four approved Well Sites have been constructed based on final design of the approved PWM/GWR Project. The two remaining Well Sites would be relocated as part of the Proposed Modifications. In addition, the Proposed Modifications also include the construction of an additional Well Site.~~

As previously discussed in **Section 2.1**, the Proposed Modifications include an increase in the amount of injection to achieve an additional 2,250 AFY of yield; a minimum of 90% of the project yield will be injected into the confined Santa Margarita Aquifer of the Seaside Groundwater Basin. Under the Proposed Modifications, 5,750 AFY on average would be injected into the Seaside Groundwater Basin (and a maximum of up to 5,950 AFY when the maximum drought reserve injections are occurring and less when the CSIP area is using the drought reserve).

The Proposed Modifications include an expansion of the area of temporary and permanent Injection Well Facilities, in an area referred to as the Expanded Injection Well Area. The Expanded Injection Well Area would contain up to three Well Sites (~~including the relocation of two previously approved Well Sites~~), numbered #5 through #7 (named from northeast to southwest). Under the Proposed Modifications, ~~the remaining two of the four approved deep Injection Wells would be relocated into the Expanded Injection Well Area. Well Site #4 would be relocated to the northeast to Well Site #7 in the Expanded Injection Well Area. Well Site #1 would be relocated to northeast of the original Injection Well Facilities area (referred to as Well Site #5 in the Expanded Injection Well Area). In addition,~~ one new deep Injection Well would be constructed and operated at Well Site #6. In the future, replacement an additional injection wells may be built at Well Site #5 or #7, if needed to replace an injection wells. However, no replacement well is proposed for approval. Further, nNo new vadose zone wells are proposed as part of the Proposed Modifications.¹⁶

Table 2-4 and **Figure 2-5** summarize the Injection Well at each of the Well Sites.

Table 2-4
Injection Well Site Summary

Well Site Number	Location of Well Site	Status of Injection Wells
#1	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved but not constructed and the deep injection well <u>is under construction at Well Site #1</u> would be relocated to Well Site #5 (the farthest northeastern well site)
#2	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved and constructed
#3	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved and constructed
#4	Approved Injection Well Facilities Area	1 deep injection well and 1 vadose zone well have been approved but not constructed ; and the deep injection well would be relocated to Well Site #7 <u>is under construction at Well Site #4</u> .
#5	Expanded Injection Well Area	4 approved deep injection well relocated from Well Site #1. Well Site #5 is a potential site for a future new deep injection well to replace an injection well; however, no replacement well is proposed for approval.
#6	Expanded Injection Well Area	1 newly proposed deep injection well
#7	Expanded Injection Well Area	4 approved deep injection well relocated from Well Site #4. Well Site #7 is a potential site for a future new deep well to replace an injection well; however, no replacement well is proposed for approval.

¹⁶ The Approved PWM/GWR Project included analysis of eight total Injection Wells: four shallow and four deep. The Expanded PWM/GWR Project ~~will require eight~~ would include up to nine (9) total Injection Wells with up to five deep Injection Wells and up to ~~three~~ four shallow Injection Wells.

Table 2-4
Injection Well Site Summary

Well Site Number	Location of Well Site	Status of Injection Wells
* For groundwater modeling, this SEIR assumes all shallow (vadose zone) injection wells will operate at Well Sites #2 and #3 and that the approved vadose zone well at Well Site #1 is not needed. The number of wells assumed for the proposed Expanded PWM/GWR Project is eight total; however, groundwater modeling was conducted assuming seven total, five deep injection wells and two vadose zone wells and a 90%/10% split on a volumetric basis between deep and shallow aquifers. M1W will conduct additional groundwater modeling as required for permitting for the Expanded PWM/GWR Project using the approved well configuration and based on updated injection well capacities developed during design and well testing.		

Each Injection Well would be equipped with associated backwash pumps and appurtenances. **Figure 2-6** shows the conceptual design profile of the proposed deep Injection Wells.

Under the approved PWM/GWR Project, monitoring wells were proposed to be installed between the approved Well Sites and the nearest downgradient Extraction Well. Due to the relocation of the approved deep Injection Wells and the proposed additional deep well in the Expanded Injection Well Area, the location of the monitoring wells must also be relocated. They would be located in the area between General Jim Moore Boulevard and the Expanded Injection Well Area. Monitoring wells are entirely below ground and include an approximate 12-inch diameter manhole cover.

A new electrical building and backflush basin for percolation water into the vadose zone would be included at a central location within the Expanded Injection Well Area (see **Figure 2-5**). The backflush facilities at each Injection Well site would include a flow meter, a backflush pump and 400-hp motor, and an electrical cabinet, monitoring and SCADA. A main electrical power supply/transformer and motor control building would be built for PG&E power supply. In addition to incidental power requirements (instrumentation and monitoring equipment, site lighting, etc.), major power supply would be required to drive only one injection pump motor at a time.

The Proposed Modifications would also include an increase to the capacity of the approved backflush basin to accommodate backflush water produced from the deep Injection Wells in the approved Injection Well Area.

Construction

Construction of the new facilities in the Expanded Injection Well Area would occur using the same methods discussed in Section 2.10.2 on page 2-78 of the PWM/GWR Project Final EIR. These methods are included here for full understanding of this project component and have not changed since the certification of the PWM/GWR Project Final EIR.

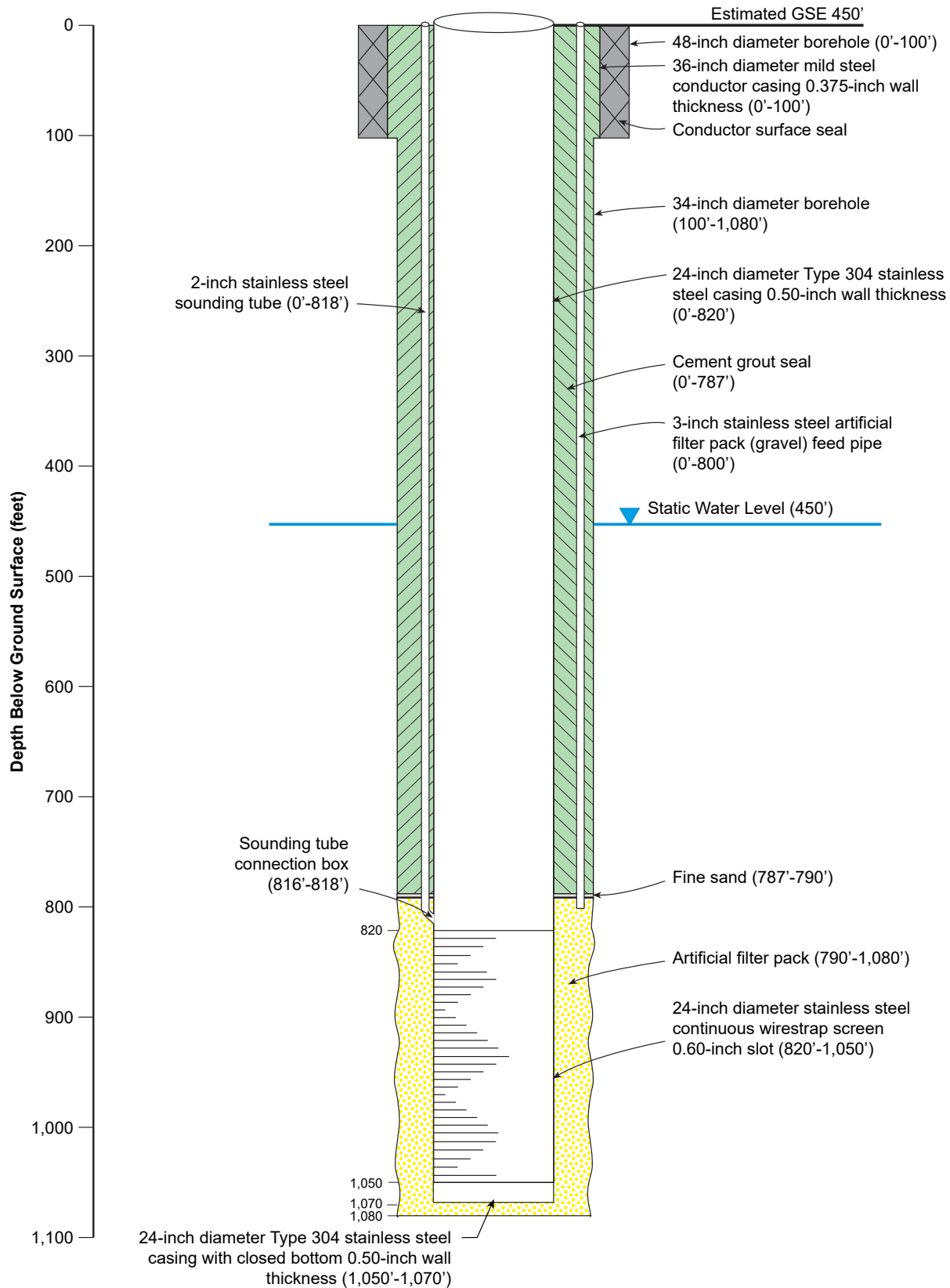
Well Construction

Installation of the wells typically follows a two-step process: 1) drilling and logging, and installation; 2) testing and equipping. This section describes these three processes.

Drilling, Logging, and Installation

The deep Injection Wells would be drilled with rotary drilling methods. The method would be customized to minimize borehole impacts from drilling fluids and may incorporate air rotary methods or specialized drilling fluids (such as polymers). Cuttings from the borehole would be logged by a California Certified Hydrogeologist. Open-hole geophysical logging would also be conducted. Spoils will be spread on-site. A temporary diesel pump (up to 500-hp) would be used for eight-hours at each well to develop and test the well after construction.

Deep Well at Well Sites #5, #6, and #7



Source: Todd Groundwater, October 2019

Conceptual Design Profile for Deep Injection Well

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Figure
2-6

Testing and Equipment

Both constant discharge and constant injection testing would be completed in the Injection Well following well drilling. Constant rate tests would be preceded by step tests, as appropriate, to identify preferred rates for each test. Flowmeter surveys would be conducted following pumping and injection testing to identify water movement within the wellbore. Depending on the objectives of the test, both static and dynamic flow testing may be recommended.

At the end of the constant rate discharge test, a water quality sample would be collected to confirm local groundwater quality. Constituents targeted for analysis would be based on compliance with the applicable State Board- Division of Drinking Water regulations and recommendations contained in the Engineering Report prepared for well construction, as well as ambient groundwater quality in the Santa Margarita aquifer in the area.

Backflush Pipeline Facilities Construction

To construct the backflush pipeline and basin, the contractor would excavate pipe trenches, retain the spoilage on site, import and install bedding material, and lay pipe, backfill & compact trench.

Estimated construction time for this component is approximately four months. The temporary construction area along the alignment of the 14-inch diameter backflush water pipeline would be approximately 25 to 50 feet wide, for its approximate 2,000-foot length. Hence, the ground surface disturbance area would be between 2.5 acres. The construction area width is to provide space for a backhoe, trucks for hauling excess soil material and imported bedding material. The depth of the pipeline trench would be approximately five feet to allow for bedding of the pipe and about three to four feet of cover material.

Percolation Basins Construction

Percolation basins are required for disposal of periodic well backflushing cycles, and for disposal of well development and testing water for new or rehabilitated wells. Percolation basins located within the wellfield recharge to the vadose zone. The approved PWM/GWR Project assumed one basin, which was recently constructed at Well Site #4. The backflush cycles ~~are~~were planned to occur weekly, flushing at a rate of 2,624 gpm for four hours, but have recently been conducted at 1,000 to 2,000 gpm for two hours. This produces approximately 84,200 cubic feet of water, or 1.9 acre-feet. The approved basin at Well Site #4 holds 2.1 acre-feet of water, which allows 1-foot of freeboard. At a percolation rate of 6-inches per hour, the pond drains in under 24-hours based on well development water during construction of the first two project deep Injection Wells. The target flow rate for well testing and development is 2,500 gpm for eight hours. This produces a volume of 160,430 cubic feet, or 3.7 acre-feet. A percolation basin of 4.0 acre-feet is recommended to hold that volume of water with a minimum of 1-ft of freeboard. A basin of that size would also accommodate backflushing two wells in sequence without a lag-day to allow for percolation. A second percolation basin would be constructed to accommodate the additional well development and backflush water from the Expanded Injection Well Area between Well Sites #5 and #6 as shown on **Figure 2-5**. The new percolation basin would have a capacity of 4.0 acre-feet, requiring the excavation of approximately 6,500 cubic yards of material and placing it on the adjacent slopes or using it to create level Well Sites. The total area of soil disturbance is approximately 1.5-acres.

Pump Motor Control/Electrical Conveyance Construction

A main electrical power supply/transformer and motor control building would be built at each Injection Well Site for PG&E power supply. In addition to incidental power requirements (instrumentation and monitoring equipment, site lighting, etc.), major power supply would be

required to drive one pump motor at a time for backflushing the deep wells. The following activities would be required to construct the pump motor control and electrical conveyance facilities:

- excavation, spoilage handling, import and install bedding material, building foundation, trench, place concrete, backfill & compact trench, finish concrete floor of electrical building;
- install exterior electrical control cabinets on the paved area at the three deep Injection Wells (only one of which is a new Well Site, the other two are relocated from previously approved sites); and
- for electrical buildings, construct block walls, doors, louvers, roof and appurtenances, then interior finishes, lighting and HVAC; and electrical equipment and wiring.

The estimated construction period for these facilities is approximately 6 months. The temporary construction area would be approximately 25 to 50 feet wide within the alignment of the 14-inch diameter backflush water pipeline. There would be no additional surface disturbance for construction of electrical conduits beyond that for the 14-inch backflush water pipeline. Construction activities would include installation of a buried electrical power conduit and instrumentation conduits, all of which would be underground and encased in a concrete ductbank, which would run in parallel and near the 14-inch backflush pipeline. The depth of the ductbank trench would be approximately 4.5 to 5 feet to allow for about 3 feet of cover material. The electrical control building that would house the electrical and instrumentation (SCADA) transmission equipment would be approximately 16 feet by 24 feet. Its foundation construction would be slab-on-grade; hence, excavation would be only about 3 feet deep. The construction surface area would be about 600 square feet.

Operation and Maintenance

Operation of the Injection Well Facilities in the Expanded Injection Well Area would occur using the same methods discussed in Section 2.10.3 on page 2-50 of the PWM/GWR Project Final EIR. These methods are included below for reference and have not changed since the certification of the PWM/GWR Project Final EIR. The Proposed Modifications would change the locations, aquifers (or depth), and injections volumes. Injection volumes and flowrates by month are provided in **Table 2-5**. The new aquifer-specific injection volumes by well (including a variety of forecasted scenarios) are provided in **Appendix D, Groundwater Modeling Analysis Technical Memorandum**.

Table 2-5

Expanded Injection Flows, Including Drought Reserve (MCWD irrigation flows not included)

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Volume per month (AF)	625	569	621	381	382	370	382	386	376	607	610	640
Well Flow Rates (gpm)												
Maximum	5,257	5,257	5,257	5,257	5,257	5,257	5,257	5,257	5,257	5,257	5,257	5,257
Average	4,563	4,602	4,534	2,874	2,798	2,788	2,791	2,827	2,837	4,432	4,603	4,680
Minimum	0	0	0	0	0	0	0	0	0	0	0	0

Injection Wells and associated electrical and mechanical systems would operate 24 hour per day, 7 days per week throughout the year, although it is unlikely that all the wells would be actively injecting at the same time for any length of time. Operations and maintenance staff would visit the site most likely once daily Monday through Friday nearly every week. In addition to operation and maintenance of the wells, the workers would inspect above ground valves and appurtenances to assure they are properly functioning and to conduct and monitor the backflush operations.

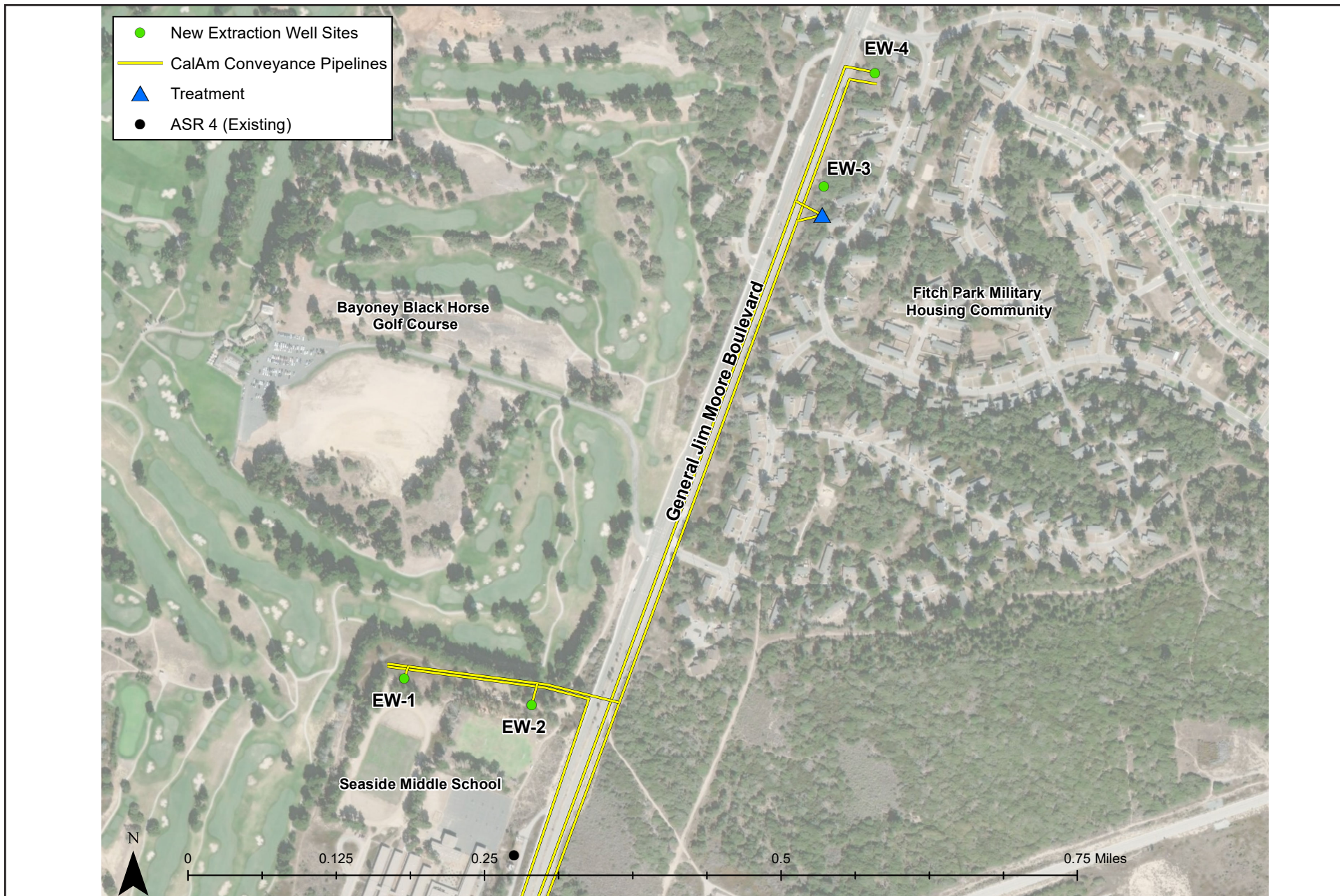
Backflushing of each Injection Well would occur for about four hours weekly and would require discharge of the backflush water to the percolation basin. M1W will conduct backflushing and visual checks of the backflush water discharge to confirm adequate flushing time has been provided. Approximately once per year, a diking machine would be used to scarify the bottom of the pond to increase/restore the percolation rate.

Monitoring wells would be used to monitor project performance and compliance with State Board – Division of Drinking Water regulations. Because the Proposed Modifications would recharge two separate aquifers (Paso Robles and Santa Margarita Aquifers), monitoring wells would be sampled to satisfy regulatory requirements for monitoring of subsurface travel time, tracer testing, and other requirements for a groundwater replenishment project.

No changes to the operational vehicle trips and employees would occur (see Table 2-10 of the PWM/GWR Project Final EIR). Operational electricity demands are discussed later in this chapter (see **Section 2.6**).

2.6.5 Modifications to CalAm Facilities for Expanded PWM/GWR Project

The Proposed Modifications include a total of four new Extraction Wells; two at the Seaside Middle School Property (Extraction Wells #1 and #2) and two near the Fitch Park Community (Extraction Wells #3 and #4), located southeast of the intersection of General Jim Moore Bouvard and Ardennes Circle, as shown on **Figure 2-7**.



Proposed Modifications to CalAm Distribution System

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Figure
2-7

All Extraction Wells would be constructed with associated appurtenances, electrical works, pipeline tie-ins, access road, and other site works including grading and fencing, see **Figure 2-8 Flow Schematic of Existing and Proposed CalAm Extraction Well Facilities** for a schematic of these facilities and how they connect to the CalAm Distribution System discussed below.

For each of the proposed Extraction Wells, the following assumptions and information are used as the basis of design.

Wells screened in the Santa Margarita Aquifer in this area have proven to be large capacity wells and exploratory borings at the Extraction Well #3 and #4 sites confirm the aquifer characteristics for extraction improve to the north. The siting of four Extraction Wells to the north of ASR Wells #3 and #4 would provide the additional production capacity required to support the Proposed Modifications, plus system redundancy and back-up.

The Santa Margarita Sandstone Aquifer is ubiquitous in this area of the Seaside Groundwater Basin and had been found to be on the order of 200 to 250 feet thick. The Extraction Wells would be designed with wire wrap well screens across the entire thickness of the formation. The wells would contain a 20-foot cellar (or sump) at the base of the screened interval extending down into the Monterey Formation.

To achieve the required pumping rate of 1,750 gallons per minute (GPM), a blank casing diameter of 18 inches would be utilized for the Extraction Wells. This diameter would allow the pump bowl assemblage to be set as low as necessary to achieve the design well capacity.

For the purposes of well construction, a minimum 4-inch annular thickness is required to run a tremie pipe for proper installation of gravel pack and cement seal materials. Accordingly, a minimum 26-inch diameter borehole is required to construct the Extraction Wells.

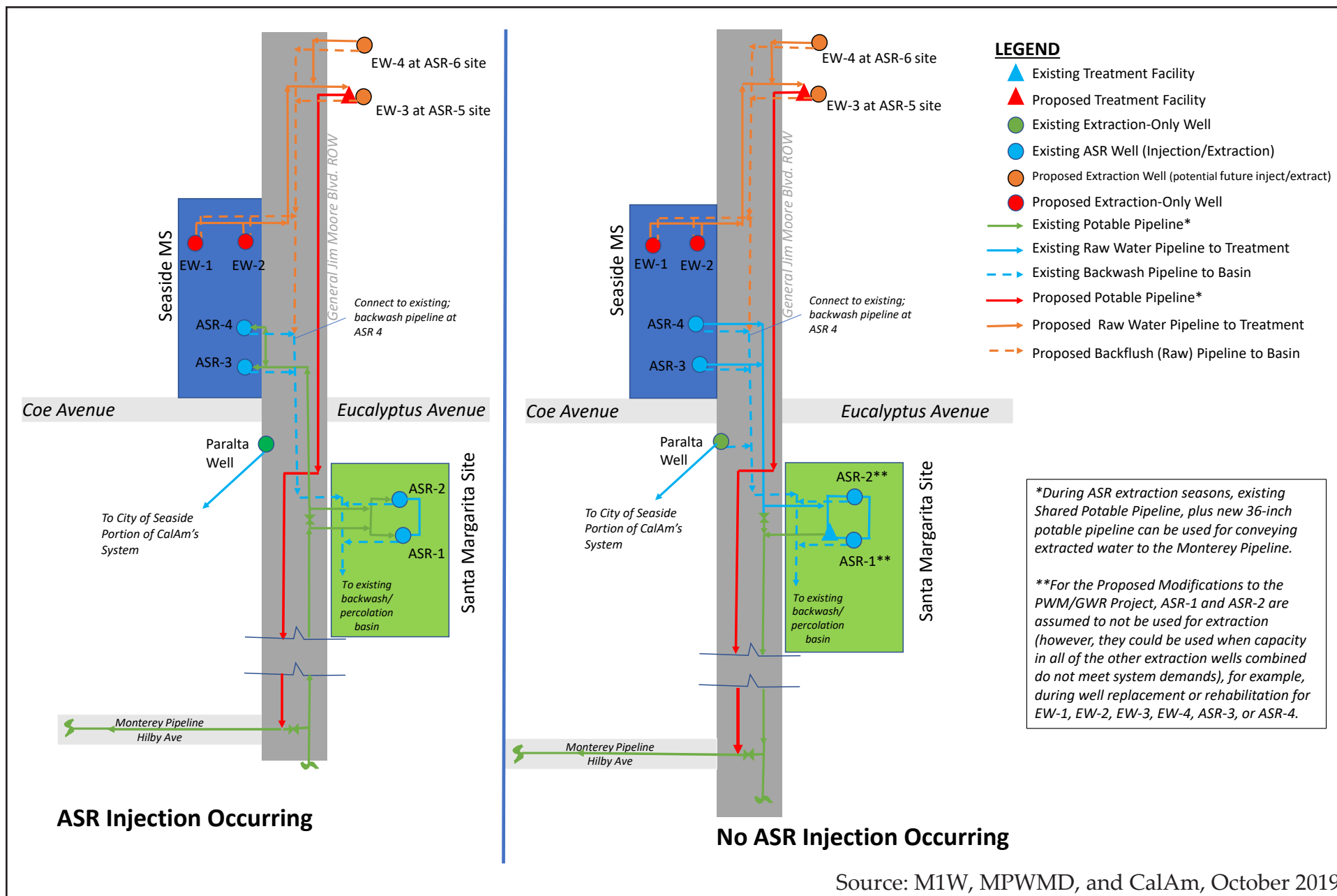
The Extraction Well #3 and Extraction Well #4 sites are approximately 0.5 and 0.6 miles northeast of the Extraction Well #2, respectively and are about 690 feet apart therefore, those two wells will be able to be pumped simultaneously with each other and with Extraction Wells #1 and/or #2, with no impact to pumping capacity of the wells.

In addition, an electrical building would be constructed at each Extraction Well location. The building would be made of fiberglass and would have its own sound proofing and ventilation. All switch gear and power panels would be installed inside the building.

Extracted raw water from all four new wells would be conveyed in new raw water pipelines within General Jim Moore Boulevard for treatment using new water treatment facilities, including disinfection, located at Extraction Well #3. The treatment at Extraction Well #3 would include a building measuring approximately 24-feet by 30-feet and 15-feet tall with raw and treated water pipelines and appurtenances, chemical delivery, storage, metering, feed/injection systems, SCADA/electrical instrumentation and controls, and safety and climate control equipment.

Construction

Construction of the new facilities in the Expanded Injection Well Area would occur using the same methods discussed in Section 2.10.2 on page 2-78 of the PWM/GWR Project Final EIR and the overview for the proposed Injection Well Facilities, above.



Extraction Well Facilities Flow Schematic

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Supplemental EIR

Figure
2-8

Operation and Maintenance

Maintenance of the Extraction Wells would involve routine backflushing. Backwash effluent containing elevated levels of sediment and turbidity would be conveyed through the proposed pipeline discussed below to the existing backflush basin at the ASR #1 and #2 Site at the intersection of General Jim Moore Boulevard and Coe Avenue, and would infiltrate into the ground. As part of ongoing operations of the Extraction Well system, sediment that accumulates in the settling basin is periodically removed and disposed of at an appropriate disposal site to prevent the settling basin from clogging. No changes to the anticipated vehicle trips and employees would occur (see Table 2-10 of the PWM/GWR Project Final EIR). Operational electricity demands are discussed later in this chapter (see **Section 2.6**).

2.6.5.1 CalAm Conveyance Facilities

New pipelines would be required to connect the new extraction wells with the existing MPWMD and CalAm backwash, treatment, and distribution systems. Under the current ASR system operation, water supply from the Carmel River is conveyed from the CalAm Monterey service area main distribution system through a 30-inch MCWD-owned pipeline in General Jim Moore Blvd to the ASR wells. Water flows north in the 30-inch pipeline during ASR injection and when extraction is occurring from ASR wells, the same pipeline conveys water south to CalAm customers. Under the PWM Expansion, PWM extraction time periods will seasonally overlap with ASR injection time periods (see Figure 8 of the Montgomery & Associates Technical Memorandum in Appendix D of the Draft SEIR). During these periods, separate pipelines for ASR well injection and Seaside Groundwater Basin extraction will be needed and full extraction capabilities from two of the proposed new extraction wells would be needed at a minimum. The Proposed Modifications were conceptually designed to accommodate CalAm needs (peak day demand and total customer demand). Use of all four new extraction wells (EW-1 through EW-4) and full capacity in the conveyance pipelines could occur using only Seaside Groundwater Basin extractions.¹⁷

New pipelines to be constructed in General Jim Moore Blvd include:

- A raw water pipeline from EW-1, EW-2, and EW-3 to the treatment system proposed at the EW-3 site.
- A backwash pipeline from the new wells to the percolation basin. This is an extension of the existing pipeline connecting the ASR-3 and ASR-4 site to the ASR-1 and ASR-2 site.
- A potable water pipeline from the treatment facility at the EW-3 site to the CalAm System at Hilby Avenue.

Pipelines are shown on **Figure 2-7** schematically and on **Figure 2-8** of the Draft SEIR. Locations for these pipelines would be entirely within the roadway (City and U.S. Army right of way) and will be designed and constructed to comply with required separations between pipelines and clearances from existing utilities.

¹⁷ This may occur for short durations during a future peak demand day when all of the following occur simultaneously: CalAm's other water supplies sources are not available, the largest non-ASR well is out of service (Paralta), and ASR 1, 2, 3, and 4 are all unavailable for Seaside Groundwater Basin extractions due to maintenance or rehabilitation, injections, or the resting period between injection and extraction. These facilities are conceptually designed to meet peak demands during this set of conditions.

Construction

It is anticipated that construction of the CalAm Distribution System Improvements would occur using open trench construction methods. These methods are described above in **Section 2.6.3**. Where it is not feasible or desirable to perform open-cut trenching, trenchless methods such as jack-and-bore, drill-and-burst, horizontal directional drilling, and/or microtunneling would be employed. Pipeline segments located within heavily congested underground utility areas would likely be installed using horizontal directional drilling or microtunneling. Jack-and-bore methods would also be used for pipeline segments that cross beneath highways, major roadways, or drainages.

Jack-and-Bore and Microtunneling Methods

The jack-and-bore and microtunneling methods entail excavating an entry pit and receiving pit at either end of the pipe segment. A horizontal boring machine or auger is used to drill a hole, and a hydraulic jack is used to push a casing through the hole to the opposite pit. As the boring proceeds, a steel casing is jacked into the hole and pipe is installed in the casing.

Drill-and-Burst Method

The drill-and-burst method involves drilling a small pilot hole at the desired depth through a substrate, and then pulling increasingly larger reamers multiple times through the pilot hole until the hole reaches the desired diameter. The pipe is then installed through the drilled hole.

Horizontal Directional Drilling

Horizontal directional drilling requires the excavation of a pit on either end of the pipe alignment. A surface-launched drilling rig is used to drill a small horizontal boring at the desired depth between the two pits. The boring is filled with drilling fluids and enlarged by a back reamer or hole opener to the required diameter. The pipeline is then pulled into position through the boring. Entry and receiving pits would range in size depending on the length of the crossing, but typically would have dimensions of approximately 50 by 50 feet.

Operation and Maintenance

General operations and maintenance activities associated with the new pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when necessary; inspection of valve vaults for leakage; testing, exercising and servicing of valves; vegetation maintenance along rights-of-way; and repairs of minor leaks in buried pipeline joints or segments. No changes to the operational vehicle trips and employees would occur (see Table 2-10 of the PWM/GWR Project Final EIR). Operational electricity demands are discussed later in this chapter (see **Section 2.6**).

Table 2-6

Summary of Temporary and Permanent Footprint of Proposed Modifications

Project Component	Construction Boundary (feet)		Permanent Component Footprint (feet)			
	Length	Width	Length	Width	Maximum Height	Maximum Depth
Advanced Water Purification Facility	No additional ground disturbance is proposed as part of this modification.		No change to the existing footprint of the Advanced Water Purification Facility is proposed as part of this modification.			
Product Water Conveyance Pipeline (worst case lengths assumed for a pipeline to Well Site #7)						
Blackhorse Reservoir to first Injection Well (Well Site #5)	5,280	10-15	5,280	<6	0	10
Well Site #5 to Well Site #7	2,000	10-15	2,000	<6	0	10

Table 2-6
Summary of Temporary and Permanent Footprint of Proposed Modifications

Project Component	Construction Boundary (feet)		Permanent Component Footprint (feet)			
	Length	Width	Length	Width	Maximum Height	Maximum Depth
Backflushing Pipeline	2,000	10-15	2,000	<6	0	10
Injection Well Facilities						
Well cluster, including: one Deep Injection Well, one Vadose Zone Well, motor control building, transformer, and space for replacement wells	300	125	100	90	15	1,050 (Deep)
Second Backflush Basin	500	150	500	120	2-3 for pipe outlet only	10
Monitoring wells, including up to six well clusters with two wells at each site	100	100	3	3	0	900
Access Roads to Injection Wells, including underground pipeline & electrical	8,400	40	8,400	20	0	10
Electrical conduit along General Jim Moore Blvd and, if needed, Eucalyptus Rd.	560	10	560	3	0	6
Electrical Building	200	150	60	90	10	6
Access roads to monitoring wells	1,000	20	1,000	10	0	2
CalAm Distribution System Improvements						
CalAm Conveyance Pipelines	14,500	30-80	14,500	<6	0	6
Extraction Wells 1-4	200	200	100	100	10	600 to 800
Source: Monterey One Water, Alison Imamura, Associate Engineer, October 2019						

2.6.6 Overall Energy Demand of Proposed Modifications

The Proposed Modifications would result in an incremental increase in energy (electricity) use primarily due to the operation of the higher peak production capacity and pumping by the product water pump station at the Advanced Water Purification Facility and additional backflushing at the Injection Wells. CalAm's new extraction facilities will be replacing similar electricity demands for their existing water supplies, therefore are not considered new demands. The incremental increase in energy demand associated with the operation of the expanded Advanced Water Purification Facility would be accommodated through the purchase of electricity produced from Monterey Regional Waste Management District (MRWMD)'s landfill biogas. **Table 2-7**, identifies anticipated energy demand associated with the Proposed Modifications, including injection and extraction. As shown in **Table 2-7**, there is sufficient available renewable energy from the MRWMD to accommodate the incremental increased demand from the Proposed Modifications. The total new PG&E electricity demand for the Expanded PWM/GWR Project electricity would be approximately 45 mWhr/yr, a reduction of 125 mWhr/yr compared to the 5 mgd PWM/GWR Project due to net changes in use of water for injection and for crop irrigation.

Table 2-7
PWM/GWR Project Electricity Demands with Proposed Modifications
(all in average megawatt-hours per year, mWhr/yr)

Source Water Diversion and Storage Sites	
Existing M1W Wastewater Collection Pump Stations (increased pumping for source water collection)	1,100
Proposed Salinas Pump Station Diversions (lighting, SCADA, misc. electricity) [Note: this facility operates using primarily solar energy.]	10

Table 2-7

PWM/GWR Project Electricity Demands with Proposed Modifications
(all in average megawatt-hours per year, mWhr/yr)

Source Water Diversion and Storage Sites	
Proposed Salinas Industrial Wastewater Treatment Plant Storage and Recovery Component (pumping, lighting, SCADA, misc. electricity)	100
Existing Salinas Treatment Facility and Stormwater Operations (reduction of pumping, Ron Cole, February 2014 modified by M1W staff October 2014)	(1,875)
Proposed Reclamation Ditch Diversion (pumping, lighting, SCADA, misc. electricity)	250
Proposed Blanco Drain Diversion (pumping, lighting, SCADA, misc. electricity)	731
Treatment Facilities at Regional Treatment Plant	
Existing Primary and Secondary Processes (existing on-site cogeneration facility would provide a reduction in this value, see below)	3,673
Existing Salinas Valley Reclamation Plant (SVRP) (existing plant operations use solar electricity, reducing electricity demand by up to 1,400 mWhr/yr)	1,100
7.6 AFY Advanced Water Purification Facility (Kennedy Jenks April 2018, assumes 6,500 AFY of water production)	19,197
Existing CSIP Supplemental Wells	
Reduction of use of CSIP Supplemental Wells due to new source waters for SVRP	(1,607)
Injection Well Facilities	
Backflush of five (5) deep injection wells, lighting, HVAC, meters, instruments, SCADA	236
Proposed New Electricity Generation at M1W Existing Cogeneration Facility	(2,999)
New Purchased electricity from Monterey Regional Waste Management District (1)	(19,871)
NET TOTAL (with reduction in energy demand from renewable energy sources)	45
(1) The Monterey Regional Waste Management District (MRWMD) utilizes biogas produced by the decomposition of waste material to produce electrical energy. MRWMD will provide additional for Advanced Water Purification Facility at the site. The Regional Treatment Plant is adjacent to the landfill and power generation facility operated by MRWMD.	

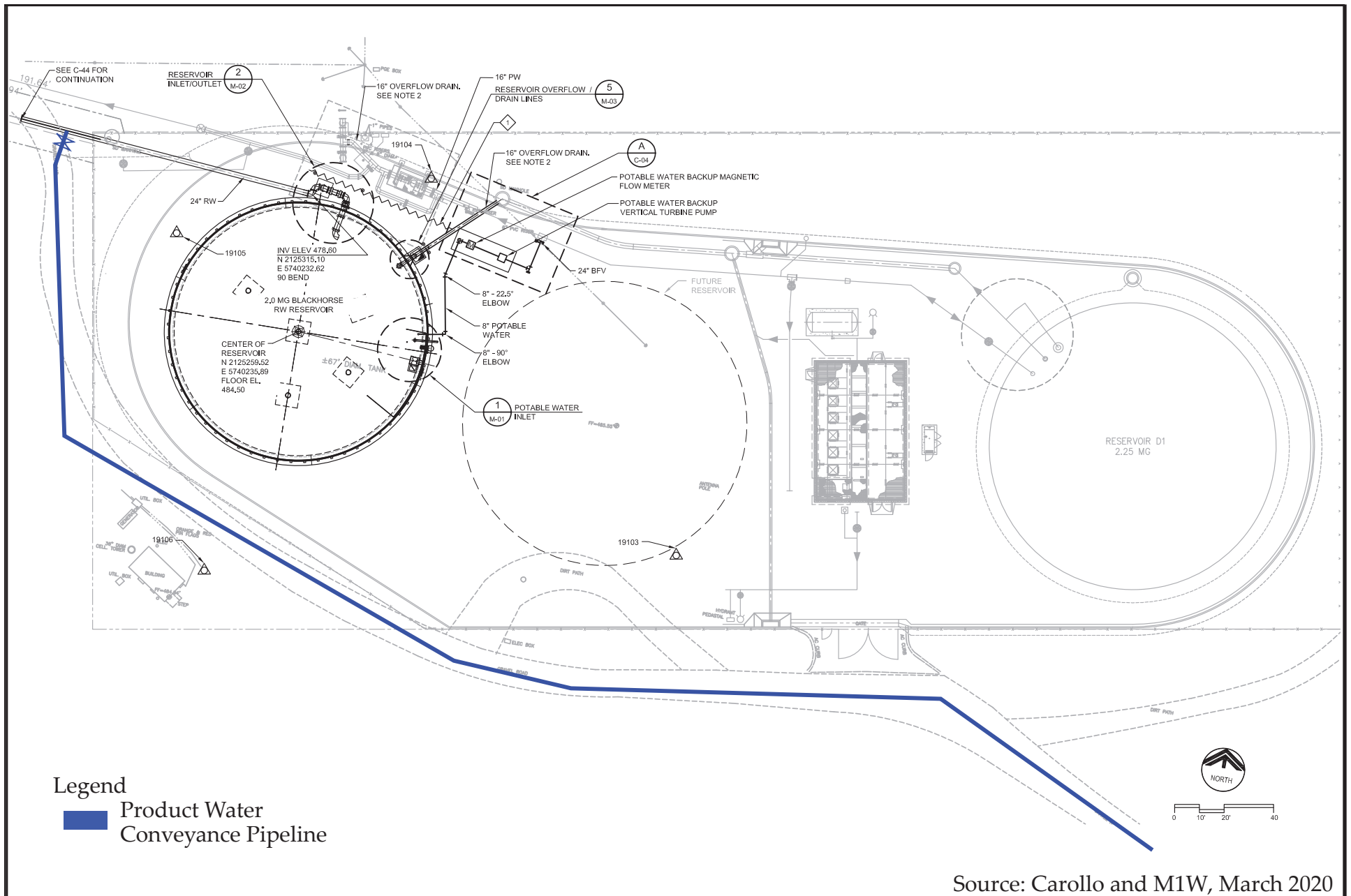
2.7 PERMITS AND APPROVALS

The PWM/GWR Project Final EIR identified the various permits and approvals applicable to the approved PWM/GWR Project; at pg. 2-98. Many of the permits and approvals would need to be amended to accommodate the Project Modifications. **Table 2-8** below provides a summary of the required permit amendments.

Revised Table 2-8:

New or Amended Permits or Approvals for Proposed Modifications

Permit (*=amend existing approval/permit)	Component
Federal	
National Historic Preservation Act (NHPA) Section 106 Compliance*	CalAm Facilities
Endangered Species Act Coordination with U.S. Fish and Wildlife Service (USFWS) regarding Existing Biological Opinion*	Injection Well Facilities and CalAm Facilities
Endangered Species Act Coordination with National Marine Fisheries Services (NMFS)*	Advanced Water Purification Facility
U.S. Army (Army) Land Easement*	CalAm Facilities
National Oceanic and Atmospheric Administration – Office of National Marine Sanctuaries Authorization of the National Pollutant Discharge Elimination System Permit (NPDES) Amendment	Advanced Water Purification Facility
State	
Amendment to Water Recycling Requirements/ Waste Discharge Requirements*	Advanced Water Purification Facility and Injection Well Facilities
Amendment to Waste Discharge Requirements/ NPDES for Regional Treatment Plant Ocean Outfall*	Advanced Water Purification Facility
California Public Utilities Commission relevant approvals for Construction and/or Rate Recovery	CalAm Facilities
Local	
City of Seaside Use Permit	Injection Well Facilities and CalAm Facilities
City of Seaside Grading and Ordinance Ordinance Permit	Injection Well Facilities and CalAm Facilities (Wells only)
Monterey County Use Permit* (Modification of Existing Permit)	Advanced Water Purification Facility
City of Seaside Encroachment Permit	Injection Well Facilities and CalAm Facilities
Fort Ord Reuse Authority (FORA) Right of Entry and Easement	Injection Well Facilities
Seaside Groundwater Basin Watermaster Water Storage Permit*	Injection Well Facilities
Monterey County Health Department Well Drilling Permit	Injection Well Facilities and CalAm Facilities (Wells only)
Marina Coast Water District (ongoing coordination)	Ongoing coordination for implementation of the Pure Water Delivery and Supply Agreement (M1W and MCWD, April 8, 2016, amended Dec. 18, 2017)
Monterey Bay Air Resources District Permit to Operate or statewide portable equipment registration	Equipment such as engine generator sets and compressors



Product Water Conveyance Alignment New

March 2020

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Figure
2-5A
NEW

EXHIBIT C.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1 Summary of Impacts and Mitigation Measures and **Table 2** Summary of Cumulative Impacts and Mitigation Measures list the impacts and mitigation measures of the Pure Water Monterey Groundwater Replenishment Project and the Proposed Modifications. This table has been updated from the 2020 Final SEIR to include notes about the effects of the 2021 Changes to the Injection Well Facilities. The 2021 Changes to the Injection Well Facilities will not increase the severity of any previous identified significant impacts, nor would these changes result in any new significant impacts. In addition, the 2021 Changes to the Injection Well Facilities would not result in any changes to the mitigation measures presented in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
AE-1: Construction Impacts on Scenic Views, Scenic Resources and Visual Quality of the Surrounding Areas. Construction of the Proposed Modifications would not result in substantial effects on scenic views, scenic resources, or the visual character or quality of public views of the areas surrounding the Proposed Modifications facilities.	NI	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
AE-2: Construction Impacts due to Temporary Light and Glare. Construction of the Proposed Modifications could result in substantial, temporary sources of light or glare.	LS	NI	LS	LSM	LSM	LSM	AE-2: Minimize Construction Nighttime Lighting. (Applies to the CalAm Extraction Wells and Conveyance Pipelines).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions and associated mitigation measures remain the same.
AE-3: Degradation of Visual Quality of Sites and Surrounding Areas. Proposed Modifications would not result in a substantial degradation of the visual character of the project area and its surroundings.	LS	NI	LS	LSM	NI	LSM	AE-3: Provide Aesthetic Screening for New Above-Ground Structures. (Applies to the following project components: CalAm Extraction Wells).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions and associated mitigation measures remain the same.
AE-4: Impacts due to Permanent Light and Glare during Operations. Operation of Proposed Modifications may result in a substantial new source of light or glare that would adversely affect day or nighttime views in the area.	LS	NI	LSM	LSM	NI	LSM	AE-4: Exterior Lighting Minimization. (Applies to the following project components: Injection Well Facilities and CalAm Extraction Wells).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measure AE-4 would continue to apply to

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
								the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.
AQ-1: Construction Criteria Pollutant Emissions. Construction of the Proposed Modifications would result in emissions of criteria pollutants, specifically PM10, that may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard.	LSM ¹	LSM ¹	LSM ¹	LSM ¹	LSM ¹	LSM ¹	AQ-1: Construction Fugitive Dust Control Plan. (Applies to All Proposed Modifications).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measure AQ-1 would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.
AQ-2: Construction Exposure of Sensitive Receptors to Pollutant Emissions. Construction of the Proposed Modifications would not expose sensitive receptors to substantial pollutant concentrations.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
AQ-3: Construction Odors. Construction of the Proposed Modifications would not result in other emissions (e.g., odors) that	LS	LS	LS	LS	LS	LS	None required	The 2021 Changes to Injection Well Facilities

¹ Under Impact AQ-1, the implementation of each component when looked at individually would not have a significant impact; it is only when all components are implemented together (with overlapping construction schedules) that a significant impact would occur triggering Mitigation Measures to reduce the impact to less than significant (LS).

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
would adversely affect a substantial number of people.								would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
AQ-4: Construction Greenhouse Gas Emissions. Construction of the Proposed Modifications would generate greenhouse gas emissions, either directly or indirectly, but would not cause the Project with the Proposed Modifications to make a considerable contribution to significant cumulative impacts due to greenhouse gas emissions and the related global climate change impacts.	LS: The construction of the Proposed Modifications would not make a considerable contribution to significant cumulative impacts due to greenhouse gas emissions and the related global climate change impacts.						None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
AQ-5: Operational Criteria Pollutant Emissions. Operation of the Project with the Proposed Modifications would not expose sensitive receptors to substantial pollutant concentrations.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
AQ-6: Operational Greenhouse Gas Emissions. Operation of the Proposed Modifications would generate GHG emissions, either directly or indirectly. These emissions would not cause the Project with the Proposed Modifications to exceed significance thresholds such that they would result in a considerable contribution to	LS: The Proposed Modifications would not make a considerable contribution to significant cumulative impacts of greenhouse gas emissions and the related global climate change impacts						None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
	KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact							
significant cumulative impacts of GHG emissions. In addition, the Proposed Modifications would not conflict with applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.								
BF-1: Habitat Modification Due to Construction of Diversion Facilities.	NI	NI	NI	NI	NI	NI	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.
BF-2: Interference with Fish Migration Due to Project Operations.	NI	NI	NI	NI	NI	NI	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.
BF-3: Reduction in Fish Habitat or Fish Populations Due to Project Operations.	NI	NI	NI	NI	NI	BI	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
BT-1: Construction Impacts to Special-Status Species and Habitat. Construction of the Proposed Modifications may adversely affect, either directly or through habitat modification, special-status plant and wildlife species and their habitat within the Biological Study Area.	NI	LSM	LSM	NI	NI	LSM	BT-1a: Implement Construction Best Management Practices. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility) BT-1b: Implement Construction-Phase Monitoring. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility) BT-1c: Implement Non-Native, Invasive Species Controls. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility) BT-1d: Conduct Pre-Construction Surveys for California Legless Lizard. (Applies to Product Water Conveyance Pipelines, Injection Well Facilities, and Extraction Wells) BT-1e: Prepare and Implement Rare Plant Restoration Plan to Mitigate Impacts to Kellogg's Horkelia. (Applies to Product Water Conveyance Pipeline and Injection Well Facilities) BT-1f: Conduct Pre-Construction Protocol-Level Botanical Surveys within the remaining portion of the Biological Study Area. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility) BT-1h: Implementation of Mitigation Measures BT-1a and BT-1b to Mitigate Impacts to the Monterey Ornate Shrew, Coast Horned Lizard, Coast Range Newt, Two-Striped Garter Snake, and Salinas Harvest Mouse. (Applies to Injection Well Facilities and Extraction Wells) BT-1i: Conduct Pre-Construction Surveys for Monterey Dusky-Footed Woodrat. (Applies to Injection Well Facilities and Extraction Wells) BT-1j: Conduct Pre-Construction Surveys for American Badger. (Applies to Injection Well Facilities and Extraction Wells) BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measures BT-1a through BT-1K would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
							BT-1m: Minimize effects of nighttime construction lighting. (Applies to Injection Well Facilities and Extraction Wells)	
BT-2: Construction Impacts to Sensitive Habitats. Proposed Modifications construction may adversely affect sensitive habitats (including riparian, wetlands, and/or other sensitive natural communities) within the Biological Study Area.	NI	LS	LS	NI	NI	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
BT-3: Construction Conflicts with Local Policies, Ordinances, or Approved Habitat Conservation Plan. Construction of the Proposed Modifications would potentially conflict with local policies or ordinances protecting biological resources. A potential conflict may occur if the Fort Ord HMP plant species on the former Fort Ord that do not require a take authorization from the Service or CDFW are impacted, and salvage is not conducted. There are no approved HCPs applicable to the Proposed Modifications.	NI	LSM	LSM	LSM	LSM	LSM	BT-4: Fort Ord HMP Plant Species Salvage. (Applies to Product Water Conveyance Pipeline, Expanded Injection Well Facilities, Extraction Wells, and CalAm Conveyance Pipelines)	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measure BT-4 would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.
CR-1: Construction Impacts on Archaeological Resources or Human Remains. Construction of the Proposed Modifications may result in a substantial adverse change in the significance to unknown archaeological resources during construction and/or encounter unknown human remains.	LSM	LSM	LSM	LSM	LSM	LSM	CR-2b: Discovery of Archaeological Resources or Human Remains. (Applies to all Proposed Modifications components). CR-2c: Native American Notification (Applies to all Proposed Modifications)	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measures CR-2b and CR-2c would continue to apply. These impact conclusions and associated mitigation measures remain the same.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
CR-2: Construction Impacts on Unknown Paleontological Resources. Construction of the Proposed Modifications would not result in damage to or destruction of unknown paleontological resources.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
EN-1: Construction Impacts due to Temporary Energy Use. Proposed Project and Project Modifications construction could result in wasteful or inefficient use of energy if construction equipment is not maintained or if haul trips are not planned efficiently. The Proposed Project and Project Modifications would not conflict with existing energy standards.	LSM	LSM	LSM	LSM	LSM	LSM	EN-1: Construction Equipment Efficiency Plan. (Applies to all Proposed Modification components).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measure EN-1 would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.
EN-2: Operational Impacts due to Energy Use. Proposed Project operations would not result in the consumption of energy such that existing supplies would be substantially constrained nor would the Project result in the unnecessary, wasteful, or inefficient use of energy resources.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GS-1: Construction-Related Erosion or Loss of Topsoil. Construction of the	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
Proposed Modifications would not result in substantial soil erosion or the loss of topsoil.								severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GS-2: Construction-Related Soil Collapse and Soil Constraints during Pipeline Trenching. Construction of some Proposed Modifications pipeline components would be located on geologic units or soils that are unstable, or that may become unstable during project construction, and potentially result in soil instability or collapse; however, this exposure would not result in a substantial risk to people or structures.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GS-3: Exposure to Seismic Ground Shaking and Liquefaction. The Proposed Modifications would be located in a seismically active area; however, operations of the Proposed Modifications would not expose people or structures to a substantial risk of loss, injury, or death involving exposure to seismic groundshaking and liquefaction.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GS-4: Hydro-Collapse of Soils from Well Injection. Operation of the Proposed Modifications would not create a substantial risk to life or property due to its facilities being located on a geologic unit or soils that are unstable, or that would become unstable as a result of hydro-collapse.	NI	NI	LS	NI	NI	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
HH-1: Use and Disposal of Hazardous Materials During Construction. Construction of the Proposed Modifications would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HH-2: Accidental Release of Hazardous Materials During Construction. Construction of the Proposed Modifications would not create a significant hazard due to upset and accident conditions involving the release of hazardous materials into the environment.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HH-3: Construction of Facilities on Known Hazardous Materials Site. Construction of the Proposed Modifications would occur on a known hazardous materials site pursuant to Government Code Sec. 65962.5; however, the Proposed Modifications would not result in a significant hazard to people or the environment.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
HH-4: Use of Hazardous Materials During Construction Within 0.25-Miles of Schools. Construction of the Proposed Modifications would not result in nor create a significant hazard to the public or the environment due to handling of hazardous materials or hazardous emissions within 0.25 mile of a school during construction.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HH-5: Wildland Fire Hazard during Construction. Construction of the Proposed Modifications would not increase the risk of wildland fires in high fire hazard areas.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HH-6: Use and Disposal of Hazardous Materials During Operation. Operations of the Proposed Modifications would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HH-7: Operation of Facilities on Known Hazardous Materials Site. Proposed Modifications facilities would be located on a known hazardous materials site; however, the Proposed Modifications would not result	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
in a significant hazard to people or the environment.								remain the same as in the 2020 Final SEIR.
GW-1: Construction Groundwater Depletion, Levels, and Recharge. Construction of the Proposed Modifications components would not deplete groundwater supplies nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of local groundwater levels.	NI	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GW-2: Construction Groundwater Quality. Construction of the Proposed Modifications would not violate any water quality standards or otherwise degrade water quality.	NI	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GW-3: Operational Groundwater Depletion and Levels: Salinas Valley Groundwater Basin. Operation of the Project with the Proposed Modifications would not deplete groundwater supplies in the Salinas Valley Groundwater Basin nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater levels in the Salinas Valley Groundwater Basin.	NI	NI	NI	NI	NI	BI	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
GW-4: Operational Groundwater Depletion and Levels: Seaside Basin. Operation of the Project with the Proposed Modifications would not deplete groundwater supplies in the Seaside Basin nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater levels in the Seaside Basin.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
GW-5: Operational Groundwater Quality: Salinas Valley. Operation of the Proposed Project would not degrade groundwater quality in the Salinas Valley.	NI	NI	NI	NI	NI	BI	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.
GW-6: Operational Groundwater Quality: Seaside Basin. Operations of the Project with the Proposed Modifications would not degrade groundwater quality in the Seaside Basin, including due to injection of purified recycled water into the basin.	NI	NI	BI/LS ²	LS	LS	BI/LS ²	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HS-1: Construction Impacts to Surface Water Quality due to Discharges. Construction of the Proposed Modifications involve well drilling and development. Dewatering of shallow groundwater during excavation would generate water requiring	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions

² For concentrations of total dissolved solids and chloride, the impact would be beneficial; for all other water quality parameters, the impact would be less than significant.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
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disposal. Compliance with existing regulatory requirements would ensure that water disposal during construction would not violate any water quality standards or waste discharge requirements or substantially degrade surface water quality, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality.								remain the same as in the 2020 Final SEIR.
HS-2: Construction Impacts to Surface Water Quality due to Earthmoving and Drainage Alterations. Construction of the Proposed Modifications would not violate any water quality standards or waste discharge requirements, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality including marine water quality, due to earthmoving, drainage alterations, and use of hazardous chemicals.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HS-3: Operational Impacts to Surface Water Quality due to Well Maintenance Discharges. Operation of the Proposed Modifications would not violate any water quality standards or waste discharge requirements, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality due to well maintenance discharges.	NI	NI	LS	LS	NI	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HS-4: Operational Marine Water Quality due to Ocean Discharges. The Proposed Modifications' operational discharges of reverse osmosis concentrate to the ocean through the M1W outfall would not violate water quality standards or waste discharge	LS	NI	NI	NI	NI	LS	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
requirements, or otherwise substantially degrade water quality.								remain the same as in the 2020 Final SEIR.
HS-5: Operational Drainage Pattern Alterations. The Proposed Modifications would alter existing drainage patterns by increasing impervious surfaces, but would not substantially increase the rate or amount of runoff such that it would: (1) cause erosion or siltation on- or off-site, (2) cause flooding on- or offsite, (3) exceed the existing storm drainage system capacity, or (4) impede or redirect flood flows.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
HS-6: Operational Carmel River Flows. Operations of the Proposed Modifications would result in reduced pumping of the Carmel River alluvial aquifer resulting in increased flows in Carmel River that would benefit habitat for aquatic and terrestrial species.	BI	BI	BI	BI	BI	BI	None required.	The 2021 Changes to Injection Well Facilities would not changes this level of impact. These impact conclusions remain the same as in the 2020 Final SEIR.
LU-1: Operational Consistency with Plans, Policies, and Regulations. The Proposed Modifications would have one or more components that would potentially conflict, or be inconsistent with, applicable land use plans, policies, and regulations without implementation of mitigation measures identified in this Supplemental EIR.	LSM	LSM	LSM	LSM	LSM	LSM	All other mitigation measures (see Table 4.12-4 in Section 4.12, Land Use, Agriculture, and Forest Resources).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. All applicable mitigation measures would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measures remain the same.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
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MR-1: Operational Impacts on Marine Biological Resources. Operation of the Proposed Modifications would not result in substantial adverse effects on candidate, sensitive, or special-status species and would not interfere substantially with the movement of any native resident or migratory fish or wildlife species.	LS	NI	NI	NI	NI	LS	None required.	No impact would result from the 2021 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2020 Final SEIR.
NV-1: Construction Noise. Construction would result in a temporary increase in ambient noise levels in the vicinity of all Proposed Modifications sites. Temporary construction noise would not be substantial at most construction sites, except at the CalAm Extraction Wells.	LS	LSM	LS	SU	LSM	SU	NV-1a: Drilling Contractor Noise Measures. (Applies to Expanded Injection Well Facilities, CalAm Extraction Wells) NV-1c: Neighborhood Notice. (Applies to Expanded Injection Well Facilities, CalAm Extraction Wells) NV-1e: Additional Noise Controls for Nighttime Construction of Wells. (Applies to CalAm Extraction Wells) NV-1f: Offsite Accommodations for Substantially Affected Nighttime Receptors near Wells. (Applies to CalAm Extraction Wells)	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions and associated mitigation measures remain the same.
NV-2: Operational Noise. Operation of the Proposed Modifications would potentially increase existing noise levels, but would not exceed noise level standards except at CalAm Extraction Wells.	LS	LS	LS	LSM	LS	LSM	NV-2: Stationary-Source Noise Controls. (EW-3 and EW-4)	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions and associated mitigation measure(s) remain the same.
PH-1: Construction-Related Growth Inducement. Construction of the Proposed Modifications would result in temporary increases in construction employment but would not induce substantial population growth.	-	-	-	-	-	LS	None required.	The 2021 Changes to Injection Well Facilities would not change this level of impact. These impact conclusions remain the same.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
								same as in the 2020 Final SEIR.
PH-2: Operations-Related Growth Inducement. Operation of the Proposed Modifications would not result in substantial population growth directly during project operations.	-	-	-	-	-	LS	None required.	The 2021 Changes to Injection Well Facilities would not changes this level of impact. These impact conclusions remain the same as in the 2020 Final SEIR.
PS-1: Construction Public Services Demand. Construction of the Proposed Modifications would not result in increased demands for fire and police protection services, schools, or parks that would result in the need for new or physically altered facilities to maintain service capacity or performance objectives.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
PS-2: Construction Landfill Capacity. Construction of the Proposed Modifications would result in generation of solid waste; however, the solid waste would be disposed at a landfill with sufficient permitted daily and overall capacity to accommodate the project's solid waste disposal needs.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
PS-3: Construction Solid Waste Policies and Regulations. Construction of the Proposed Modifications would potentially	LSM	LSM	LSM	LSM	LSM	LSM	PS-3: Construction Waste Reduction and Recycling Plan. (Applies to all Proposed Modifications).	The 2021 Changes to Injection Well Facilities would not worsen the

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
conflict with State and local statutes, policies and regulations related to solid waste.								severity of this impact. Mitigation Measure PS-3 would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measure(s) remain the same.
PS-4: Public Services Demand During Operation. Operation of the Proposed Modifications would not result in increased demands for fire and police protection services, schools, or parks that would result in the need for new or physically altered facilities to maintain service capacity or performance objectives.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
PS-5: Landfill Capacity for Operations. Operation of the Proposed Modifications would not result in adverse effects on landfill capacity or be out of compliance with Federal, State, and local statutes and regulations related to solid waste.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
TR-1: Construction Traffic. Construction of the Proposed Modifications would result in a temporary increase in traffic volumes on regional and local roadways due to construction-related vehicle trips, which would not result in conflicts with a program,	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.								remain the same as in the 2020 Final SEIR.
TR-2: Construction-Related Traffic Increases, Safety and Access Limitations. Construction activities could result in temporary traffic increases, safety hazards, and/or disruption of access.	LS	LS	LS	LS	LSM	LSM	TR-2: Traffic Control and Safety Assurance Plan. (Applies to CalAm Conveyance Pipeline).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions and associated mitigation measure(s) remain the same.
TR-3: Construction-Related Roadway Deterioration. Construction truck trips could result in increased wear-and-tear on the designated haul routes, which could result in temporary impacts to performance of the regional circulation system.	LSM	LSM	LSM	LSM	LSM	LSM	TR-3: Roadway Rehabilitation Program (Applies to All Proposed Modifications).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. Mitigation Measure TR-3 would continue to apply to the Injection Well Facilities with the 2021 changes. These impact conclusions and associated mitigation measure(s) remain the same.
TR-4: Construction Parking Interference. Construction activities may temporarily affect parking availability.	LS	LS	LS	LS	LSM	LSM	TR-4: Construction Parking Requirement (CalAm Conveyance Pipeline).	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
								These impact conclusions and associated mitigation measure(s) remain the same.
TR-5: Operational Traffic. Operation and maintenance of the Proposed Modifications would result in small traffic increases on regional and local roadways, but would not substantially affect the performance of the regional circulation system or result in a significant increase in VMT.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
WW-1: Construction-Related Water Demand. The Proposed Modifications would result in a temporary increase in water use due to construction-related demand. Existing water supplies would be sufficient to serve this construction-related demand. No new or expanded water supply sources are warranted.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
WW-2: Construction-Related Wastewater Generation. The Proposed Modifications would result in a temporary increase in wastewater generation due to demand from construction workers, but existing wastewater treatment facilities have sufficient capacity to serve construction-related demands.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 1. Summary of Impacts and Mitigation Measures

Impact Statement	Advanced Water Purification Facility (no changes)	Product Water Conveyance Pipeline (no changes)	Injection Well Facilities with 2021 Changes	CalAm Distribution System Extraction Wells (no changes)	CalAm Distribution System Conveyance Pipelines (no changes)	Proposed Modifications Overall (no changes)	Mitigation Measure Number, Name, and Applicability	Notes about 2021 Changes to the Injection Well Facilities
KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact								
WW-3: Operational Water Supply. Sufficient water supplies are available for operation of the Proposed Modifications.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
WW-4: Operational Wastewater Treatment Capacity. Operation of the Proposed Modifications would not result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the Proposed Modifications' projected demand in addition to M1W's existing commitments.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.
WW-5: Operational Need for New Water or Wastewater Treatment Facilities or Expansion. Operation of the Proposed Modifications would not result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities beyond those evaluated in this Supplemental Draft EIR.	LS	LS	LS	LS	LS	LS	None required.	The 2021 Changes to Injection Well Facilities would not worsen the severity of this impact. These impact conclusions remain the same as in the 2020 Final SEIR.

Table 2. Summary of Cumulative Impacts and Mitigation Measures (no changes³)

#	Topical Section/ Cumulative Impact Issue	Determination of Significance and Discussion of Contribution of the Proposed Modifications to Cumulative Impacts (if applicable)
4.2	Aesthetics	LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to significant cumulative construction or operational aesthetic impacts.
4.3	Air Quality and Greenhouse Gas	LSM: The Proposed Modifications would potentially make a considerable contribution to significant cumulative regional emissions of PM ₁₀ ; however, with implementation of Mitigation Measure AQ-1, the impact would be reduced to less than significant.
4.4	Biological Resources: Fisheries	NI: The Proposed Modifications would make no contribution to a cumulative impact on fishery biological resources.
4.5	Biological Resources: Terrestrial	LS: The Proposed Modifications would not cause the Project to make a considerable contribution to significant cumulative impacts to terrestrial biological resources.
4.6	Cultural and Paleontological Resources	LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative construction or operational cultural resources impacts.
4.7	Energy	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to a cumulative impact to energy resources.
4.8	Geology, Soils, and Seismicity	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative geology, seismicity or soils impacts.
4.9	Hazards and Hazardous Materials	LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative impacts related to hazards or hazardous materials.
4.10	Hydrology/Water Quality: Groundwater	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative impacts to hydrology and water quality of groundwater resources.
4.11	Hydrology/Water Quality: Surface Water	Inland Surface Waters LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative construction or operational impacts to hydrology or water quality of inland surface waters.
		Marine Surface Waters LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative construction or operational impacts to hydrology or water quality of marine waters.
4.12	Land Use	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to a cumulative land use impact.
4.13	Marine Biological Resources	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative impacts to marine biological resources.
4.14	Noise and Vibration	LS: The Project Modifications would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative noise and vibration impacts.
4.15	Population and Housing	LS: The Proposed Modifications would not cause the Project to make a considerable contribution to significant cumulative impacts related to population and housing
4.16	Public Services, Recreation, and Utilities	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to cumulative impacts related to schools, parks, recreational facilities or other public services and utilities (fire and police protection, solid waste).

³ No changes to the conclusions of the cumulative impact analysis would occur due to the 2021 Changes to the Injection Well Facilities. Because the 2021 Changes to the Injection Well Facilities do not increase the extent or intensity of any construction or operational activities, there would be no increase to the severity of any cumulative impacts nor would there be any new cumulative impacts. The 2021 Changes to Injection Well Facilities would not result in any new significant cumulative impacts or worsen the severity of any significant cumulative impacts previously identified in the 2020 Final SEIR. These impact conclusions and mitigation measures remain the same as in the Final SEIR.

Table 2. Summary of Cumulative Impacts and Mitigation Measures (no changes³)

#	Topical Section/ Cumulative Impact Issue	Determination of Significance and Discussion of Contribution of the Proposed Modifications to Cumulative Impacts (if applicable)
4.17	Traffic and Transportation	LS: The Proposed Modifications would not cause the Project to make a cumulatively considerable contribution to significant cumulative traffic and transportation impact.
4.18	Water Supply and Wastewater Systems	LS: The Proposed Modifications would not cause the project as a whole to contribute to a new significant cumulative impact or substantially increase the severity of the project's contribution to a significant cumulative impact on water supply or wastewater system

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April 24, 2020

VIA EMAIL & FEDEX

Board of Directors
Chayito Ibarra, Clerk of the Board
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Re: **April 27, 2020, Board of Directors Meeting, Agenda Item #7-C,**
Proposed Modifications to the Pure Water Monterey Groundwater Replenishment
Project, Final Supplemental Environmental Impact Report (“Final SEIR”)

Dear Honorable Board of Directors:

On behalf of California-American Water Company (“Cal-Am”), we submit this letter in response to Agenda Item #7-C for Monterey One Water’s (“M1W”) April 27, 2020, Board of Directors Meeting, concerning the Final SEIR for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (“Expansion”). As you know, Cal-Am is currently in the permitting process for the Monterey Peninsula Water Supply Project (“MPWSP”) in order to provide a safe, reliable, and drought-proof alternate water supply to Cal-Am’s customers on the Monterey Peninsula in response to the State Water Resources Control Board’s Cease and Desist Order (“CDO”). Because this Board consistently has described the Expansion as a “back-up” to the MPWSP, Cal-Am has monitored the Expansion closely for its potential implications to the water supply issues affecting the Peninsula. As expressed in Cal-Am’s comments on the Draft SEIR, Cal-Am has serious concerns about the SEIR’s adequacy and the Expansion’s overall feasibility. Cal-Am believes that its concerns have not been addressed in the Final SEIR, and that both the SEIR and the Expansion remain fundamentally flawed. Therefore, and for the reasons provided below, Cal-Am is requesting that this Board vote to deny the Expansion and decline to certify the SEIR.

Cal-Am submitted a detailed comment letter on the Draft SEIR on January 30, 2020, which provided 280 pages of evidence demonstrating material inadequacies in M1W’s California Environmental Quality Act (“CEQA”) analyses. The Final SEIR, released on April 13, 2020, failed to resolve these substantial issues, as set forth in further detail in Attachment A hereto. We have briefly summarized the Final SEIR’s most serious flaws below.

First, the Final SEIR entirely fails to evaluate the Expansion either as an alternative to or cumulative project with the MPWSP. If the Expansion is to be considered a replacement for the MPWSP—which has been suggested by certain regulatory agencies, including the California Coastal Commission—then the SEIR must evaluate the Expansion as an alternative water supply

project to the MPWSP. (See CEQA Guidelines, § 15126.6.) The Final SEIR does not undertake this critical analysis. Further, as part of its proceedings on the MPWSP (of which M1W was a party), the California Public Utilities Commission (“CPUC”) requested that the Expansion be analyzed as an addition or supplement to the MPWSP. This cumulative projects analysis still has not been conducted. Instead, the Final SEIR takes the unreasonable position that if both projects are built, the Expansion would be turned off such that the projects would not operate at the same time. Such a position flies in the face of CEQA’s obligation that reasonably foreseeable environmental impacts must be analyzed and disclosed. (CEQA Guidelines, § 15126; *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 396.).

Second, the Final SEIR still fails to evaluate fully the Expansion’s potential impacts to biological resources, geology, hazards, hydrology and groundwater, land use planning and agricultural resources, noise and vibration, population and housing, water supply, and cumulative impacts. The Final SEIR also continues to improperly defer mitigation for energy impacts, and fails to support its air quality impact conclusions with substantial evidence.

Third, the Final SEIR fails to meaningfully respond to Cal-Am’s comments regarding insufficient source waters to operate the Expansion and the already approved Pure Water Monterey Groundwater Replenishment Project (“PWM/GWR Project”). Cal-Am provided M1W with expert analysis prepared by Dudek (Exhibit A to Cal-Am’s January 30, 2020, comment letter) that addresses the Draft SEIR’s failure to document the quantity and reliability of the source waters purportedly available to serve the Expansion. Cal-Am also requested that M1W specifically identify the quantity of water expected to be obtained from each water source or where such information can be found. Rather than address Cal-Am concerns on individual source waters or provide the public with clarity as to specific quantities of source waters that are available, the Final SEIR frustrates public review by wholly altering the water supply estimates provided with the Draft SEIR.

Specifically, the new Source Water Operation Plan Technical Memorandum attached as Appendix M to the Final SEIR dramatically increased the quantity of secondary effluent source water from what was considered in the Draft SEIR. As a result, the Final SEIR claims that many of the individual water sources evaluated in the Draft SEIR are no longer required for the Expansion to operate. The Final SEIR and Appendix M do not explain how the vast quantity of secondary effluent suddenly became available or why such sources were not considered previously. By including last minute information about new water rights and sources purportedly available for the Expansion, M1W has rendered the Draft SEIR inadequate and deprived the public of meaningful review and comment. Recirculation is now required. (CEQA Guidelines § 15088.5; *Save Our Peninsula Comm. v Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 131.)

Further, Appendix M acknowledges that the Expansion would reduce the availability of recycled water for anticipated future demands of the Castroville Seawater Intrusion Project (“CSIP”). However, no analysis was provided on the loss of these source waters to the CSIP or the effect on implementation of the Sustainability Goals of the Salinas Valley Basin Groundwater Sustainability Agency’s (“SVBGSA”) Groundwater Sustainability Plan (“GSP”), adopted on January 9, 2020. The GSP’s Sustainability Goals include management of groundwater and other available water resources in the 180/400-Foot Aquifer Subbasin for long-term community,

financial, and environmental benefits. To achieve this, the GSP contemplates expansion of recycled water use within the CSIP and other areas and efforts to prevent further seawater intrusion. The Expansion will frustrate the GSP's goals by reducing recycled water available to the CSIP. By reducing deliveries to the CSIP, the Expansion will cause increased and continued pumping of groundwater and promote conditions that facilitate rather than retard seawater intrusion. The Final SEIR is inadequate because it does not include a consistency analysis of the Sustainability Goal of the GSP and for failing to evaluate and disclose reasonably foreseeable environmental impacts that could result from the reduction in recycled water deliveries. (CEQA Guidelines, § 15126; Laurel Heights, *supra*, 47 Cal.3d at 396.)

Finally, the Final SEIR fails to support its conclusions about water supply and demand with substantial evidence. Unlike the CPUC's supply and demand determinations, which were based on six years of review and voluminous evidence submitted under oath by multiple parties (including MIW), the Final SEIR only relies on estimates prepared by Dave Stoldt, General Manager of MPWMD. Mr. Stoldt bases his estimates on numerous inaccurate assumptions, and his most recent evaluation was added to the Final SEIR without any public review. (See Final SEIR, Appendix O ["Updated Stoldt Memo"]). Like his prior estimates attached to the Draft SEIR (the "Initial Stoldt Memo"), the Updated Stoldt Memo continues to ignore the growth projections provided by individual cities in Cal-Am's service area, selectively choosing its own projections. Contrary to the Final SEIR's conclusions and attempts to bolster Mr. Stoldt's credibility, Mr. Stoldt's estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].)

Given Cal-Am's commitment and responsibility to secure safe, reliable and drought-proof water for its customers and comply with the CDO, Cal-Am cannot support a water supply project with such significant unanswered questions and considerable evidence demonstrating it is not feasible. Cal-Am is particularly concerned about the ability of the Expansion to provide an adequate and reliable water supply sufficient to satisfy the requirements for lifting the CDO. Accordingly, for the reasons summarized above and detailed in the attachment to this letter, Cal-Am respectfully requests that the Board deny the Expansion and decline to certify the Final SEIR.

Very truly yours,



Duncan Joseph Moore
of LATHAM & WATKINS LLP

Attachments

cc: Rich Svindland, California-American Water Company
Ian Crooks, California-American Water Company
Kathryn Horning, Esq., California-American Water Company
Tony Lombardo, Esq., Lombardo & Associates

ATTACHMENT A

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**CALIFORNIA-AMERICAN WATER COMPANY
COMMENTS ON THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT
REPORT FOR THE PWM EXPANSION PROJECT**

I. FAILURE TO ANALYZE THE MPWSP AS A CUMULATIVE PROJECT OR ALTERNATIVE PROJECT

- Final SEIR fails to evaluate the MPWSP as a cumulative project with the Expansion or as a project alternative. (Responses to Comments VV-3, VV-4, VV-110 to VV-115.)
 - Cal-Am Comments VV-3, VV-4, and VV-110 to VV-115 identified the Draft SEIR’s failure to analyze the MPWSP as a cumulative project or an alternative. The Draft SEIR did not contemplate the cumulative impacts of both the Expansion and the MPWSP being implemented concurrently or in short succession. Further, given that the Expansion’s sponsors intend that it serve as an alternative to the MPWSP—and not as a true back-up to the MPWSP—the Draft SEIR should have analyzed the MPWSP as an alternative to the Expansion to achieve Peninsula water demands.
 - Final SEIR Responses to Comments VV-3, VV-4, and VV-110 to VV-115 (which refer to Master Responses #4 and #5) fail to evaluate the MPWSP as a cumulative project and as an alternative. In fact, the Final SEIR takes the unreasonable position that the MPWSP is neither a cumulative project nor an alternative to the Expansion. (See Final SEIR, pp. 3-24, 3-22.) The SEIR cannot have it both ways.

First, it is reasonably foreseeable that the Expansion could be pursued as a water supply project alternative to the MPWSP. In its October 28, 2019, staff report on the MPWSP, the California Coastal Commission specifically identified that the Expansion could be pursued as an alternative to the MPWSP. As such, the SEIR must evaluate the Expansion as an alternative to the MPWSP – which it has failed to do. (See CEQA Guidelines, § 15126.6.)

Second, if the Expansion and MPWSP are not alternative water supply projects, then it is reasonably foreseeable that both could operate concurrently, in short succession, or collectively take place over the same period of time, and thus, are cumulative projects. (See CEQA Guidelines, §§ 15130, subd. (b)(1)(A), 15355, subd. (b).) The Final SEIR acknowledges the MPWSP as a cumulative project for purposes of construction-related cumulative impacts (Final SEIR, p. 3-23), but still fails to evaluate the operational-related cumulative impacts and claims that no such impacts would occur. (*Id.*, p. 3-22.) Further, the Final SEIR’s position that the Expansion is not a cumulative project ignores the practical reality that it makes little sense to undertake the significant expense of moving forward with the Expansion if it would stop operating the moment the MPWSP begins running. Omitting an analysis of reasonably foreseeable impacts violates CEQA’s basic requirements. (CEQA Guidelines, § 15126; *Laurel Heights, supra*, 47 Cal.3d at 396.)

- In addition to violating CEQA's basic requirements, the Final SEIR's responses to Cal-Am's comments on these issues do not satisfy the requirements of CEQA Guidelines Section 15088, which require a good faith, reasoned response to the significant environmental points raised.

II. PROJECT DESCRIPTION

- Final SEIR fails to demonstrate that the Expansion is capable of meeting its own Project Objectives. (Responses to Comments VV-5, VV-8 to VV-8b.)
 - Cal-Am Comment VV-5 and VV-8b requested that the SEIR be revised to explain how delays in the completion and operation of the already approved Pure Water Monterey Groundwater Replenishment ("PWM/GWR") Project may impact the Expansion's ability to meet its Project Objectives. The Final SEIR dismissed Cal-Am's concerns alleging that the ability of the Expansion to meet the stated Project Objectives is unrelated to any construction delays for the already approved PWM/GWR Project. Moreover, Master Response to Comment #6 admits that it is "unlikely" that the Expansion can be completed by December 31, 2021, the date by which Cal-Am must achieve the Cease and Desist Order's diversion limitations applicable to the Carmel River. Master Response to Comment #6 further admits "that is currently not possible to estimate when the [Expansion] will be completed." Given this uncertainty, it is doubtful that the Expansion is capable of meeting its stated objective of "commencing operation, or being substantially complete, by the end of 2021 or as necessary to meet Cal-Am's replacement water needs." If the Expansion is unable to meet stated Project Objectives, MIW should find that the project is infeasible and select an appropriate alternative.
 - Cal-Am Comments VV-8 to VV-8b explained that the CPUC determined that Cal-Am's replacement water needs were 14,000 AFY, and requested that the Draft SEIR be revised to address the CPUC's evaluation of supply and demand. The Final SEIR asserts that because the CPUC did not prepare its own water supply and demand evaluation, the CPUC's demand determination of 14,000 AFY has no bearing. (See D.18-09-017, p. 171.) The Final SEIR ignores that the CPUC made its 14,000 AFY determination based on evidence presented from multiple parties – including M1W – and that M1W does not have authority to divest the CPUC of its exclusive jurisdiction over public utilities and declare a new demand requirement. (See Pub. Util. Code, § 761, 1001.) Rather than addressing these issues, the Final SEIR defers to David Stoldt's supply and demand analysis in Appendix O of the Final SEIR – which is an analysis that M1W itself did not prepare. Contrary to the Final SEIR's conclusions, the unvetted and unsubstantiated estimates from Mr. Stoldt do not constitute substantial evidence in support of the SEIR's conclusions. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].) Appendix O cannot constitute substantial evidence upon which the SEIR may rely.

ATTACHMENT A

- Final SEIR fails to provide substantial evidence in support of its water supply and demand conclusions. (Responses to Comments VV-7 to VV-7g.)
 - Cal-Am Comments VV-7 to VV-7g explained that the SEIR cannot rely on the estimates of a single person—Mr. Stoldt—to support its conclusions regarding the feasibility of the Expansion. Cal-Am identified the significant flaws underlying Mr. Stoldt’s assumptions, and noted that the SEIR should instead rely on the CPUC’s determinations, which were based on evidence submitted under oath by multiple parties. In particular, Cal-Am identified that Mr. Stoldt selectively utilized growth projections intended to achieve his desired water demand estimates, ignoring the higher growth and future water supply projections from individual cities in Cal-Am’s Monterey District service area.
 - The Final SEIR fails to provide substantial evidence supporting its water supply and demand conclusions. Instead, the Final SEIR refers to Master Response #3, a revised version of Mr. Stoldt estimates at Appendix O—which was not available to the public during the comment period—and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous material flaws that Cal-Am (and others) identified in Mr. Stoldt’s prior estimates, dismissing these flaws as “differences of opinion.” Contrary to the Final SEIR’s conclusions, the unvetted and unsubstantiated estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR’s conclusions. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].)
- Final SEIR fails to analyze reductions in agricultural water supplies or explain why such impacts are not significant. (Response to Comment VV-9.)
 - Cal-Am Comment VV-9 explained that the Draft SEIR failed to evaluate potential impacts to agricultural water supplies due to a significant reduction (16%) in available agricultural irrigation water as a result of the Expansion. Specifically, Cal-Am Comment VV-9 pointed out that the Draft SEIR explains that, under the Expansion, there would be 700 to 800 afy less water available for agricultural irrigation than under the previously approved PWM/GWR Project. (Draft SEIR, pp. 2-11 to 2-12.) Comment VV-9 was based on analysis by Dudek in a memorandum attached to Cal-Am’s comments (see Dudek Comments VV-148 to 149), which found that the Draft SEIR “makes no attempt to assess the proposed changes in agricultural water deliveries, and instead defaults to a ‘no project’ baseline to draw conclusions on the significance of impacts.”
 - Final SEIR Responses to Comments VV-9 and VV-148 to VV-149 fail to respond to this specific comment or the analysis provided by Dudek, and instead refer to the 16 page Master Response #3. While Master Response #3 addresses the availability of agricultural wash water, Master Response #3 fails to address the environmental impacts associated with reduced availability of agricultural irrigation water under the Expansion, beyond acknowledging that the Expansion

Project would reduce the future beneficial increases of recycled water for the CSIP. Therefore, the Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.

- Final SEIR fails to analyze reductions in wastewater discharge through the ocean outfall. (Response to Comment VV-10.)
 - Cal-Am Comment VV-10 explained that under the PWM Expansion Project, less municipal wastewater would be discharged through the ocean outfall. (Draft SEIR, p. 2-11.) Accordingly, Cal-Am Comment VV-10 requested that the SEIR be updated to assess how reduction in wastewater discharge would affect operations of the MPWSP in a cumulative project scenario, particularly in the context of ocean water quality.
 - Final SEIR Response to Comment VV-10 fails to provide any specific response to Cal-Am’s concerns, and instead refers to Master Response #4 regarding the adequacy of the SEIR’s cumulative impacts analysis. Master Response #4 asserts that the Expansion “is not expected” to operate concurrently with the MPWSP, and therefore need not be analyzed as a cumulative project. However, as discussed above, the Final SEIR also asserts that the Expansion is not an alternative to the MPWSP, ignoring the fact that other government agencies view the Expansion as a potential alternative water supply to the MPWSP. The Final SEIR therefore attempts to avoid a complete analysis of the Expansion’s impacts on ocean water quality as a result of reduced wastewater discharge by arguing that the Expansion is neither an alternative to nor a cumulative project with the MPWSP. The Final SEIR’s conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088, and it fails to comply with CEQA’s basic requirement that reasonably foreseeable impacts be analyzed. (CEQA Guidelines, § 15126, 15165; *Laurel Heights, supra*, 47 Cal.3d at 396.)
- Cal-Am Comment VV-11 and the Final SEIR’s response relate to the Expansion’s source water rights and the Draft SEIR’s assumptions regarding certain conditions precedent in the Amended and Restated Water Recycling Agreement (“ARWRA”). The Final SEIR’s inadequate response to these comments are addressed below in Section III.M.

III. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

A. Air Quality and Greenhouse Gases

- Final SEIR’s utilization of “spreadsheet analysis” and outdated emission estimates fails to adequately disclose the Expansion’s air quality impacts to the public and decisionmakers. (Response to Comments VV-13 to VV-18.)
 - Cal-Am Comments VV-13 to VV-18 reasonably requested that the SEIR be revised to utilize the widely accepted CalEEMod air emissions model, to utilize the most up-to-date mobile source emissions model (EMFAC2017), and to

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adequately disclose air emission calculations, including underlying assumptions, to the public and decisionmakers. Cal-Am requested these revisions because the SEIR contains an out-of-date and opaque air emission assessment that precludes the public from cross-checking the calculations and analysis, depriving the public of key information.

- Final SEIR Responses to Comments VV-13 to VV-18 fail to provide the requested disclosures, instead arguing that the “spreadsheet analysis” is somehow more appropriate than the industry-standard CalEEMod that is recommended by the Monterey Bay Air Resources District (“MBARD”). In addition, despite admitting that use of EMFAC2017 would lead to materially increased air emissions, the Final SEIR refuses to update the calculations and instead asserts without justification that the Expansion falls within an imaginary “grace period” allegedly afforded to environmental consultants to implement the latest and most accurate emissions model. Final SEIR Responses to Comments VV-13 to VV-18 attempt to falsely portray the Final SEIR’s failure to utilize the most appropriate air emissions models as a battle of the experts. Instead, the Final SEIR has withheld information from the public that is necessary to evaluate and verify the Expansion’s actual environmental impacts. Accordingly, the Final SEIR response is inadequate and also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.
- Final SEIR’s internally inconsistent and mistaken assumptions of pipeline trench width results in a failure to properly calculate the Expansion’s worst-case daily emissions and, therefore, a failed comparison against MBARD’s daily thresholds of significance. (Responses to Comments VV-19 to VV-20.)
 - Cal-Am Comments VV-19 to VV-20 highlighted that the SEIR’s air emissions calculations and assessment assumed a 6-foot trench width for pipelines despite the fact that some trenches would be up to 12-feet wide. Cal-Am reasonably requested that the SEIR be revised to assume a 12-foot trench width to properly calculate the Expansion’s worst-case daily emissions, which is necessary for an accurate (apples-to-apples) comparison against MBARD’s daily thresholds of significance.
 - Despite admitting that a “12-foot wide trench could be constructed in some locations,” Final SEIR Responses to Comments VV-19 to VV-20 fail to assume a 12-foot trench width and refuse to properly calculate worst-case daily emissions. Instead, these responses attempt to defend the SEIR’s flawed air emission analysis by noting that the SEIR used an **average** trench width. This justification ignores that the pertinent MBARD thresholds are focused on the **worst-case daily** emissions from trenching activity, not emissions on an average day. The Final SEIR’s failure to perform the proper worst-case emissions comparison results in a withholding of information from the public necessary to evaluate and verify the Expansion’s actual environmental impact and does not satisfy the requirements of

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CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.

B. Biological Resources: Fisheries

- Final SEIR fails to assess impacts to fisheries associated with continued Carmel River withdrawals. (Responses to Comments VV-30 to VV-33.)
 - Cal-Am Comments VV-30 to VV-33 requested that the SEIR address the impacts associated with a reasonably foreseeable scenario where Peninsula water demands exceed supply with the Expansion and without the MPWSP, resulting in the need for additional Carmel River withdrawals.
 - Final SEIR Responses to Comments VV-30 to VV-33 fail to provide the requested analysis of impacts to fisheries from additional Carmel River withdrawals and claim that the Expansion would not cause unauthorized Carmel River withdrawals. The Final SEIR justifies this conclusion by continuing to rely on the improper water demand estimates prepared by MPWMD staff, which are not supported by substantial evidence as discussed above.
- Final SEIR fails to assess impacts to fisheries associated with a reduction in irrigation water and increase in stormwater capture. (Response to Comment VV-34.)
 - Cal-Am Comment VV-34 requested that the SEIR be revised to address how a reduction in irrigation water and increase in stormwater capture could affect fish habitat or populations (e.g. from runoff).
 - Final SEIR Response to Comment VV-34 fails to provide the requested analysis, and instead states that the Expansion would not divert more source water than the analysis presented in the certified PWM/GWR Project Final EIR and that the diversion of stormwater and irrigation water is already entitled. Contrary to the Final SEIR Response to Comment VV-3, there are remaining questions regarding the source water for the Expansion and, as discussed further above in Section II regarding Response to Comment VV-9, the Final SEIR failed to analyze impacts associated with the Expansion's significant reduction in irrigation water supplies. The Final SEIR fails to support its conclusion that the Expansion would not divert more source water than evaluated in the PWM/GWR Project Final EIR. Accordingly, the SEIR fails to assess potentially significant impacts associated with a reduction in irrigation water and increase in stormwater capture, which could affect fish or habitat populations.

C. Biological Resources: Terrestrial

- Final SEIR fails to provide necessary updates to Mitigation Measure ("MM") BT-1a. (Response to Comment VV-36.)
 - Cal-Am Comment VV-36 requests that the SEIR be revised to clarify MM BT-1a to explain what type of coordination is required by MM BT-1a with the City of

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Seaside regarding the location of well facilities, as well as what sensitive biotic material is being removed.

- Final SEIR Response to Comment VV-36 fails to provide the necessary updates to MM BT-1a. Instead, the response generally refers to permit amendments that may be necessary and provides no information regarding the movement of well facilities or what sensitive biotic material might be removed. By improperly deferring these details until a future process with the City of Seaside, the SEIR withholds information from the public regarding the full scope of potential impacts. The Final SEIR response also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.
- Final SEIR fails to provide necessary updates to MM BT-1d. (Response to Comment VV-37.)
 - Cal-Am Comment VV-37 requests that the SEIR be revised to clarify MM BT-1d to provide for restoration of the California legless lizard habitat.
 - Final SEIR Response to Comment VV-37 fails to provide for the restoration of the California legless lizard habitat, and instead states that the California Department of Fish and Wildlife (“CDFW”) could require restoration if deemed necessary. Because the Final SEIR failed to update MM BT-1d to provide for restoration, the MM remains inadequate and improperly defers mitigation. (*See Sundstrom v. Cty. Of Mendocino* (1988) 202 Cal.App.3d 296, 306)

D. Energy

- Final SEIR fails to provide support for conclusions regarding the Expansion’s fossil fuel consumption. (Response to Comment VV-42.)
 - Cal-Am Comment VV-42 notes that the Draft SEIR fails to justify its conclusions that the Expansion would consume less than 10 percent of fossil fuel assumed for the PWM/GWR Project, or that energy consumption for the Expansion would be efficient.
 - Final SEIR Response to Comment VV-42 fails to address meaningfully Cal-Am’s comment. The Final SEIR includes no updated analysis to support that the Expansion would not result in an inefficient or wasteful use of energy and only updates the Final SEIR to indicate that the estimated construction fuel consumption has been added to page 4.7-6 of the Draft SEIR. The Final SEIR response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.
- Final SEIR fails to address deferral of analysis and mitigation of impacts associated with MM EN-1. (Response to Comment VV-43.)

- Cal-Am Comment VV-43 raised concerns that MM EN-1, Construction Equipment Efficiency Plan, impermissibly defers analysis and mitigation of construction impacts and requested that MM EN-1 be updated to include specific performance targets pertaining to energy use during construction.
- Final SEIR Response to Comment VV-43 only partially addresses Cal-Am's concern by revising MM EN-1 to implement measures to limit heavy equipment idling. However, MM-EN-1 fails to include specific performance targets to ensure efficient energy use. Accordingly, MM-EN-1 continues to improperly defer mitigation under CEQA (*see Sundstrom, supra*, 202 Cal.App.3d at 306), and the Final SEIR also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.

E. Geology, Soils, and Seismicity

- Final SEIR fails to provide an analysis of how and to what degree temporary construction-related erosion impacts will be mitigated. (Responses to Comment VV-47.)
 - Cal-Am Comment VV-47 noted that the Draft SEIR did not provide any analysis or specific performance standards to indicate how potential temporary construction-related erosion impacts will be reduced to a less than significant level.
 - Final SEIR Response to Comment VV-47 merely references its Response to Comment VV-48, noting that changes were made to provide page citations to descriptions of BMPs and other laws and regulations. The Final SEIR does not provide anything but a cursory analysis of how temporary erosion impacts from construction activities will be successfully mitigated through BMPs and compliance with laws. The Final SEIR must give an explanation of how and to what degree the impacts will be mitigated. The Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.

F. Hazards, Hazardous Materials, and Wildfire

- Final SEIR fails to incorporate mitigation requiring compliance with regulations regarding unexploded ordinance. (Response to Comment VV-51.)
 - Cal-Am Comment VV-51 noted that while the Draft SEIR acknowledges that Expansion construction activities have the potential to encounter unexploded ordinance within the Fort Ord Military Reservation, it claimed these impacts would be addressed by compliance with federal and local regulations. Cal-Am Comment VV-51 therefore requested that the SEIR be revised to include specific mitigation to reduce potential impacts to a less than significant level.

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- Final SEIR Response to Comment VV-51 summarily dismissed Cal-Am's concerns, asserting that a mitigation measure requiring compliance with regulations regarding discovery of unexploded ordinance was "unnecessary." Accordingly, the Final SEIR improperly defers mitigation related to discovery of unexploded ordinance by failing to include the requested mitigation measure (*see Sundstrom, supra*, 202 Cal.App.3d at p. 306) and the Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.
- Final SEIR fails to analyze the wildfire hazard risk posed by the PWM/GWR Project as a whole. (Responses to Comments VV-52 to VV-53.)
 - Cal-Am Comments VV-52 to VV-53 noted that, while the Draft SEIR provides an analysis of potential wildfire hazards presented by the Expansion, M1W failed to assess cumulative impacts of the PWM/GWR Project and the Expansion as a whole. As such, Cal-Am Comments VV-52 to VV-53 requested that the SEIR be revised to incorporate a wildfire hazard assessment for the PWM/GWR Project as a whole, rather than just the Expansion.
 - Final SEIR Responses to Comments VV-52 to VV-53 declined to include any assessment of the Expansion's cumulative wildfire impacts with the PWM/GWR Project. The Final SEIR attempts to justify this refusal by asserting that the purpose of a supplemental EIR is not to reevaluate the impacts of the portions of a project that have already been approved. The Final SEIR noted that the Draft SEIR considered whether the Expansion could result in any new or increased risk of wildfire hazards when compared to the already approved PWM/GWR Project, but this is an impossibility because the PWM/GWR Project's wildfire impacts have never been analyzed. Therefore, the Final SEIR response is inadequate and fails to analyze cumulative impacts as CEQA requires. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)

G. Hydrology and Water Quality: Groundwater

- Final SEIR ignores the reasonably foreseeable impacts to groundwater from seawater intrusion of pursuing the Expansion as an alternative to the MPWSP. (Responses to Comments VV-56 to VV-57.)
 - Cal-Am Comments VV-56 to VV-57 noted that if the Expansion is pursued as a replacement to the MPWSP, then the MPWSP's benefits to the Salinas Valley Groundwater Basin ("SVGB") will not occur (i.e., further seawater intrusion can be expected).
 - Final SEIR Responses to Comments VV-56 to VV-57 avoid meaningfully responding to Cal-Am's comments by arguing that because the MPWSP does not currently exist, it is not presently providing any seawater intrusion benefits. Thus, the Final SEIR concludes that it would not reduce water injected into the SVGB compared to existing conditions, and no further analysis is necessary. The Final

SEIR's response ignores that it is reasonably foreseeable that the Expansion will be considered an alternative water supply to the MPWSP. As such, the SEIR must consider the Expansion's impacts relative to those of the MPWSP in order to enable informed decision making. (CEQA Guidelines, § 15121.) The record shows that the MPWSP would benefit the SVGB aquifers by reducing existing and preventing additional seawater intrusion. (MPWSP Final EIR/EIS, pp. 4.4-70, 4.4-92.) Therefore, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion is approved and the MPWSP is not built, including impacts to the SVGB's coastal aquifers from continuing seawater intrusion. (CEQA Guidelines, § 15126; *Laurel Heights, supra*, 47 Cal.3d at 396.)

H. Hydrology and Water Quality: Surface Water

- Final SEIR fails to address the possibility that with the Expansion, the amount of water being diverted from the Carmel River may not be reduced. (Response to Comment VV-58.)
 - Cal-Am Comment VV-58 raised significant questions regarding the Expansion's ability to meet water demand. If demand is not met, diversions from the Carmel River will not decrease or may need to increase to meet the shortfall.
 - Final SEIR Response to Comment VV-58 fails to meaningfully analyze how the Carmel River will be impacted if the Expansion fails to meet demand or otherwise provide any substantive answer. Instead, the response points to Response to Comment VV-34 and Master Response #3, which themselves are based on M1W's disputed water supply analysis authored by Mr. Stoldt. The unsubstantiated and unvetted estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR's conclusions. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].) Reliance on Mr. Stoldt's inaccurate analysis therefore results in significant undisclosed impacts to steelhead trout and other species from ongoing Carmel River diversions, which the SEIR fails to analyze as discussed in Section III.B. Additionally, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion fails to meet demand. (CEQA Guidelines, § 15126; *Laurel Heights, supra*, 47 Cal.3d at 396.)

I. Land Use, Agriculture, and Forest Resources

- Final SEIR does not assess potential land use impacts resulting from the failure of the Expansion to satisfy water demand on the Monterey Peninsula. (Responses to Comments VV-59 to VV-60 and VV-63 to VV-64.)
 - Cal-Am Comments VV-59 to VV-60 noted that the Expansion would result in significant land use impacts if the project fails to provide adequate water supply

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to meet the Monterey Peninsula's demand, and Cal-Am Comments VV-63 to VV-64 provide several examples of local planning objectives with which the Expansion would conflict if Cal-Am's service area demand is not met.

- Final SEIR Responses to Comments VV-59 to VV-60 and VV-63 to VV-64 do not address Cal-Am's concerns. To begin, the responses rely on M1W's disputed water supply analysis authored by Mr. Stoldt to support the conclusion that the Expansion will enable Cal-Am to meet its Monterey district demand. As discussed further herein, Mr. Stoldt's estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a).) Notwithstanding these claims, the Final SEIR separately acknowledges the possibility that "more water than would be provided by the [Expansion] might be needed to meet demand for water on the Monterey Peninsula." (Final SEIR, pp. 4-543 to 4-544.) This is a meaningful admission, but the Final SEIR fails to assess the reasonably foreseeable land use impacts that would result, instead claiming that "[u]nmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the [Expansion]." (Final SEIR, pp. 4-543 to 4-544.)

Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant impact on land use if it would "[c]ause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect." (Draft SEIR, p. 4.12-8.) Failure to meet water demand would constitute a significant land use impact of the Expansion by conflicting with numerous applicable land use policies that require sufficient water supplies. These applicable land use policies are outlined in Cal-Am Comment VV-63. Accordingly, by failing to meet the water demand, the Expansion would not be consistent with local policies, plans, and regulations adopted for the purpose of avoiding an environmental effect. The Final SEIR is therefore incorrect in asserting that "[u]nmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the [Expansion]." The Final SEIR has failed to assess potentially significant land use impacts and therefore fails as an informational document under CEQA.

- Cal-Am Comments VV-61 and VV-62 and the Final SEIR's responses relate to the Draft SEIR's water supply and demand analyses. The Final SEIR's failure to provide substantial evidence in support of its water supply and demand conclusions is addressed in Section II, Responses to Comments VV-7 to VV-7g *supra*.

J. Marine Biological Resources

- Final SEIR fails to include additional source water quality data for the new sources of water to evaluate impacts to marine biological resources. (Response to Comment VV-68.)

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- Cal-Am Comment VV-68 requested that the SEIR include additional source water quality data for the new source waters (i.e., Farmworker Housing and Salinas River Diversion Facility backwash).
- Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the Farmworker Housing discharge is similar to municipal sewage and that the Salinas River diversion backwash has lower pollutant concentrations than urban or agricultural run-off. The Final SEIR makes these conclusions without analysis or support. Therefore, the Final SEIR response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.
- Final SEIR fails to analyze the actual marine biological effects of changes in the ocean discharge due to the Expansion. (Response to Comment VV-69.)
 - Cal-Am Comment VV-69 requested that the SEIR marine biological impacts analysis provide a quantification of pollutant discharges or their impact on marine species within the Zone of Initial Dilution.
 - Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the analysis follows the California Ocean Plan guidelines and compares the volume within the Zone of Initial Dilution to the Monterey Bay volume to conclude that it would result in a negligible impact to marine species. The Final SEIR's failure to include an actual analysis and disclosure of associated impacts is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.

K. Noise and Vibration

- Final SEIR does not adequately describe the nearest noise sensitive receptors or ambient noise levels for the extraction wells. (Response to Comment VV-70.)
 - Cal-Am Comment VV-70 noted that the Draft SEIR's description of the environmental setting for the Expansion did not include a description of the nearest noise sensitive receptors or ambient noise measurements for the new extraction wells, and requested that the SEIR be revised to incorporate such a description.
 - Final SEIR Response to Comment VV-70 summarizes existing noise and vibration conditions that are described in Appendix K and fails to provide any new analysis to address the points raised. The Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.

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- Final SEIR continues to utilize inconsistent thresholds to assess daytime construction noise impacts and fails to disclose a potentially significant noise impact. (Responses to Comments VV-73 to VV-74.)
 - Cal-Am Comments VV-73 to VV-74 raised concerns that the Draft SEIR appeared to use inconsistent standards for assessment of construction noise impacts. Cal-Am Comments VV-73 to VV-74 noted that based on the noise threshold applied elsewhere in the SEIR, construction noise related to the conveyance pipeline would result in noise levels above the 70 dBA Leq threshold and therefore appeared to constitute a significant undisclosed impact.
 - Final SEIR Responses to Comments VV-73 to VV-74 attempt to justify use of a two-week threshold for assessing noise impacts caused by construction of the conveyance pipelines by referring to the use of such a threshold in other project EIRs. The Final SEIR also makes the unsupported assertion that daytime construction noise exceeding 70 dBA Leq would not “cause a nuisance or result in significant environmental noise impact,” unless the construction noise lasted more than two weeks. However, the Final SEIR fails to provide any evidence or explanation for the invented threshold it is applying. Accordingly, it appears that the Expansion would exceed adopted construction noise thresholds, and the Final SEIR fails to disclose a significant noise impact associated with construction of the conveyance pipeline, such that recirculation is required. (CEQA Guidelines, § 15088.5, subd. (a).)
- Final SEIR fails to describe regulations setting forth noise impact thresholds and does not provide existing noise levels for extraction well sites. (Response to Comment VV-77.)
 - Cal-Am Comment VV-77 raised a number of issues with Draft SEIR Appendix K, which the SEIR relies upon to assess noise and vibration impacts. Cal-Am noted that Appendix K does not describe any applicable regulations that set noise impact thresholds for the Expansion and does not provide existing noise levels near the proposed extraction well sites.
 - Final SEIR Response to Comment VV-77 fails to provide any additional information regarding the source of the noise impact thresholds used in Appendix K, beyond vague references to “applicable regulations and ordinances” from Monterey County and the cities of Marina and Seaside. Moreover, the Final SEIR does not provide any justification for its failure to disclose existing noise levels near the extraction well sites, but instead states that the “brief summaries” of ambient noise levels presented in Appendix K are “appropriate” for preparation of a supplemental EIR. The Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.

L. Population and Housing

- Final SEIR fails to account for any housing and population impacts related to the Expansion’s potential inability to provide adequate water supply. (Response to Comment VV-79.)
 - Cal-Am Comment VV-79 noted that the Draft SEIR failed to include any analysis of population and housing impacts related to the potential inability of the Expansion to meet the Monterey Peninsula’s water demand, without implementation of the MPWSP. Cal-Am explained that, based on the supply and demand numbers adopted by the CPUC and analyses put forth by Cal-Am’s experts, the Expansion cannot provide a reliable water supply sufficient to meet demand on the Peninsula. Moreover, even under the unsupported demand estimates put forth in the Initial Stoldt Memo, the Expansion would only satisfy a reduced five-year demand average for three years before falling out of compliance. Thereafter, the Monterey Peninsula would be without a reliable water supply to accommodate reasonable growth. Therefore, Cal-Am requested that the SEIR be revised to account for that uncertainty and to disclose any resulting impacts on population and housing.
 - Final SEIR Response to Comment VV-79 does not address these concerns, and instead notes that the Expansion is intended to serve as a back-up supply if the MPWSP is delayed. The Final SEIR then attempts to avoid responsibility for assessing any potential failure of the Expansion to provide water sufficient to meet growing demand on the Peninsula by stating that “agencies approving any development projects that might increase water demand would need to take in to account the water supply that would be available through the [Expansion]” However, that response improperly defers the analysis of a reasonably foreseeable environmental consequence that would result from the Expansion’s approval. Specifically, it is reasonably foreseeable that as a result of approval of the Expansion, the MPWSP would not be approved and thus the Peninsula’s future water demand would not be met. The SEIR therefore must evaluate housing impacts related to the inability of the Expansion to meet the Monterey Peninsula’s water demand without implementation of the MPWSP. (CEQA Guidelines, § 15126; *Laurel Heights*, *supra*, 47 Cal.3d at p. 396.)
- Final SEIR fails to disclose a potential significant impact to population and housing regarding a failure to supply sufficient water to accommodate regional affordable housing goals. (Responses to Comments VV-80 to VV-82.)
 - Cal-Am Comments VV-80 to VV-82 noted that failure to provide a water supply sufficient to accommodate increased demand and population growth on the Monterey Peninsula could depress the buildout of necessary affordable housing on the Peninsula, as dictated by the Regional Needs Housing Assessment (“RHNA”) for the Monterey Bay Area. Based on the predictions set forth in the Initial Stoldt Memo, the Expansion could only meet Peninsula demand, even with depressed demand numbers, for a maximum of three years, after which the

Peninsula would be without excess water supply to accommodate regional housing growth. This failure to meet RHNA goals for affordable housing buildout would be a significant impact that the Draft SEIR failed to analyze.

- Final SEIR Responses to Comments VV-80 to VV-82 do not attempt to address this potential impact on population and housing. The Final SEIR instead simply refers back to responses to comments VV-56, VV-63, and VV-79, Master Response #3, and Appendices N and O to the Final SEIR. None of these responses provide an analysis of a possible situation where the Expansion cannot meet Peninsula water demand and therefore cannot accommodate regional affordable housing goals. Rather, Master Response #3 attempts to argue that a failure by the Expansion to produce sufficient water to accommodate growth “would not be a consequence or adverse physical environmental effect” of the Expansion and therefore does need not be analyzed in the SEIR.

Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant population and housing impact if the Expansion would “a. induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or b. displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.” (Draft SEIR, p. 4.15-8.) In evaluating these significance criteria, the Draft SEIR examines compliance with population and housing needs projections including the RHNA. Failure of the Expansion to produce sufficient water to accommodate the Peninsula’s population would be a direct result of the Expansion and could result in the displacement of Peninsula residents – including low income residents that are unable to secure adequate housing. This potential for displacement is a reasonably foreseeable significant impact that the SEIR fails to analyze. (CEQA Guidelines, § 15126; *Laurel Heights, supra*, 47 Cal.3d at 396.) The SEIR’s failure to analyze this reasonably foreseeable significant impact and the Final SEIR’s conclusory response do not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.

M. Water Supply and Waste Water Systems

- The Final SEIR fails to analyze changed circumstances and new information affecting water supplies. (Responses to Comments VV-83 to VV-86.)
 - Cal-Am Comments VV-83 to VV 84 expressed concerns that the Draft SEIR was not adequately evaluating changed circumstances, such as climate conditions, since approval of the PWM/GWR Project Final EIR. While the Draft SEIR asserts that “[t]he existing environmental setting information contained in the PWM/GWR Project Final EIR has generally remained unchanged since the certification of the PWM/GWR Project Final EIR” (Draft SEIR p. 4.18-3), Cal-Am commented that the Draft SEIR does not evaluate if changes to climate

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conditions have impacted the availability of water sources for the Expansion since approval of the PWM/GWR Project.

- Final SEIR Responses to Comments VV-83 to VV-84 state that the Draft SEIR considered recently published and collected data, and that changes to water supplies from climate conditions and agricultural and municipal water conservation were incorporated into the Draft SEIR analysis at Section 4.18. Further, these responses point to and summarize the Greater Monterey County and the Monterey Peninsula Integrated Regional Water Management Plans, which were not previously evaluated in Draft SEIR Section 4.18, in an effort to demonstrate that source waters have not been reduced by climate change. However, neither Draft SEIR Section 4.18 or the Final SEIR's summary of the integrated regional water management plans provide meaningful analysis demonstrating that water sources for the Expansion have remained unchanged by climate conditions or other changed circumstances. As a result, the Final SEIR's response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.
- Cal-Am Comments VV-85 to VV-86 provide examples of reduced availability of water supplies since the approval of the PWM/GWR Project Final EIR that have not been evaluated in the Draft SEIR. One example identified was the reduced availability of Tembladero Slough source water that occurred since the approval of the PWM/GWR Project.
- Final SEIR Responses to Comments VV-85 to VV-86 concede that the Draft SEIR's reliance on the Tembladero Slough as a reliable water source was in fact unreliable and the Final SEIR no longer accounts for Tembladero Slough as a source of water. The removal of Tembladero Slough as a water source is just one of several examples of water supplies that have proven to be unreliable or unavailable despite M1W's prior assurances that such sources were secured. Given the change and significant reallocation of source waters proposed in the Final SEIR and Appendix M, it is apparent that the SEIR should be revised and recirculated to fully account for and evaluate the reliability of the revised set of source water proposed in Appendix M. (CEQA Guidelines, § 15088.5, subd. (a) [CEQA Guidelines require recirculation when a draft EIR is "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."].)
- The Final SEIR inappropriately relies on source water from the ARWRA. (Response to Comments VV-87 to VV-91 and VV 104 to VV-105.)
 - Cal-Am Comments VV-87 to VV-91 and VV 104 to VV-105 noted that the Draft SEIR overstates the security of source water subject to the ARWRA, while ignoring the significance of the conditions precedent that must be met in the ARWRA for all sources of water to become fully secured.

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- Final SEIR Responses to Comments VV-87 to VV-91 and VV 104 to VV-105 continue to overstate the availability of source waters under the ARWRA for the Expansion and present additional interpretation flaws that show the source waters for the Expansion are not secured.
 - First, Appendix M of the Final SEIR discusses new source waters available for use as set forth in the ARWRA, claiming that the ARWRA and Amendment No. 1 to the ARWRA allow M1W to use multiple categories of source water for the Expansion. (Final SEIR Appendix M, p. 5.) Appendix M continues to improperly assume that ARWRA new source waters apply to the Expansion, despite the fact that the ARWRA does not contemplate such a use. (See ARWRA Recitals pp. 6-7; Section 4.01 1(d).) The ARWRA was approved based on the 2015 Final EIR for the PWM/GWR Project, and the ARWRA has not been revised to allow water to be used for the Expansion. (See ARWRA Recitals pp. 6-7; Amendment No. 1.)
 - Second, instead of providing a definitive answer as to the total quantity of available source water for the Expansion, the Final SEIR avoids the question by providing four alternative scenarios in Appendix M. The estimates include normal/wet scenarios versus dry/drought scenarios when the conditions precedent in the ARWRA are met, versus when they are not. (Final SEIR, pp. 3-14 to 3-15.) However, two scenarios assume the ARWRA conditions precedent are met by June 30, 2020, which is virtually impossible. Therefore, these scenarios are neither realistic nor reasonable, and cause the Final SEIR to fail as an informational document. The other two scenarios that assume conditions are met are likewise unreasonable and speculative. These scenarios purport to demonstrate sufficient supplies for the Expansion by relying on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. M1W has not explained how or why this increase has occurred. This critical information was not subject to public review and comment. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (*Id.*) By substantially altering the water sources and supplies purportedly available to the Expansion, M1W has precluded meaningful public review and comment on this critical issue for the Expansion, and recirculation is now required. (*Save Our Peninsula Comm., supra*, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)

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- Third, recognizing M1W has water rights issues with respect to the applicability of the ARWRA's new source water facilities for the Expansion, Appendix M assumes *no* new source waters would be used for the Expansion, regardless of whether the conditions precedent in Section 16.15 of the ARWRA are met. (Final SEIR Appendix M, p. 9.) To that end, Appendix M uses an "updated set of assumptions . . . represent[ing] newer information." (*Id.*, pp. 9-11.) Appendix M does not state where these assumptions come from, who made the assumptions or whether they are accurate. For instance, the Final SEIR relies upon the availability of certain municipal wastewater flows even though the Final SEIR acknowledges that such flows have not previously been metered and that the estimates are based in part upon assumptions. (Final SEIR, p. 24-25 [Master Response # 3, pp. 3-11 to 3-12].) As a result, the analysis provided in the Final SEIR is wholly speculative and not based on substantial evidence. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].)
 - In addition to these numerous issues, the Final SEIR's response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.
- The Final SEIR continues to overstate the availability and reliability of individual sources of water. (Response to Comments VV-92 to VV-99.)
 - Cal-Am Comments VV-92 to VV-99 examine multiple sources of water (each water source is addressed in further detail below) relied on in the Draft SEIR that are not adequately secured or documented. These individual sources of water were evaluated in greater detail by Dudek in a memorandum attached to Cal-Am's comments (Exhibit A to Cal-Am's January 30, 2020, comment letter). Based on the evidence presented by Dudek, Cal-Am's comment found that the Draft SEIR's conclusion that "[s]ufficient water supplies are available for operation of the [Expansion]" was not supported by substantial evidence. Final SEIR Responses to Comments VV-92 to VV-99 fail to meaningfully respond to Cal-Am's comments and the expert analysis prepared by Dudek. Rather than respond to the stated concerns, Appendix M presents new alternative scenarios and introduces new water sources that the Final EIR uses to justify a claim that the prior water sources are no longer required for the Expansion. By fundamentally altering the sources and supplies, M1W has precluded meaningful public review and comment of the Expansion's feasibility and environmental effects, and recirculation is now required. (*Save Our Peninsula Comm.*, supra, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)

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Moreover, Appendix M mistakenly assumes that secure water rights equate to secure water supplies. Holding rights to a water source does not guarantee that the source will produce a specific supply. In order to demonstrate that the Expansion has an adequate water supply, M1W must evaluate actual data of historic and projected flows under worst case conditions, including multi-year drought and severe drought scenarios. By relying on short term assumptions of flow rates from unmetered sources, Appendix M has not and cannot demonstrate adequate water supplies for the Expansion. (*See Santa Clarita Org. for Planning the Env't v. County of Los Angeles* (2003) 106 Cal.App.4th 715 [EIR deficient because it relied on water entitlements instead of actual water supplies in analyzing water availability].)

Each water source and the Final SEIR response is addressed in further detail below.

Water Source: Municipal Wastewater Flows

- Cal-Am Comment VV-95 noted that Dudek determined that the amount of municipal wastewater flows available to the Expansion may be overestimated because the Draft SEIR does not account for evidence that municipal wastewater flows were predicted to decrease until 2030.
- Final SEIR Response to Comment VV-95 responds by conceding that municipal wastewater has declined in recent years and notes that the assumptions made in the Draft SEIR were appropriate because they were based on a 2009-2013 average of secondary effluent. Beyond speculating that future development will result in increased wastewater flows, this comment does not otherwise address Cal-Am's concern that flows were predicted to decrease until 2030. Therefore, the Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.

Water Sources: Agricultural Produce Wash Water, Lake El Estero and Salinas Storm Water Collection System

- Cal-Am Comments VV-93 to VV-94 and VV-96 to VV-99 address the speculative use of three different water sources: 1) the October 27, 2015, Agreement for Conveyance and Treatment of Agricultural Produce Wash Water by and between the City of Salinas and M1W (formerly the Monterey Regional Water Pollution Control Agency) ("2015 Agreement"); 2) Lake El Estero and; 3) the Salinas Storm Water Collection System.
 1. Regarding the Agreement for Conveyance and Treatment of Agricultural Produce, Cal-Am's comments noted that the 2015 Agreement allows agricultural produce wash water to be used for the PWM/GWR Project, but does not provide for that water to be used for other purposes including the Expansion.

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2. Regarding Lake El Estero, Cal-Am noted that the water diversion system necessary for the Expansion to obtain Lake El Estero source waters has not been constructed or funded.
3. Regarding the Salinas Storm Water Collection System, Cal-Am expressed concern about the Expansion's use of water from the Salinas Storm Water Collection System because the Draft SEIR concluded that it was "reasonably likely" that M1W could secure the rights to this source through a future agreement with the City of Salinas.

Cal-Am noted that use of all three water sources is entirely speculative and therefore requested that the Draft SEIR be revised to exclude the speculative use of these sources.

- Final SEIR Responses to Comments VV-93 to VV-94, VV-96 to VV-99, and Appendix M do not respond to Cal-Am's comments. Instead, Appendix M evaluates new scenarios where agricultural wash water, Lake El Estero, and the Salinas Storm Water Collection System are not used by the Expansion. However, the Draft SEIR has not been revised to remove these sources as intended source waters for the Expansion. Further, no explanation is provided for not accepting Cal-Am's request. Recommendations and objections on major environmental issues that are rejected by responses to comments must be addressed in detail, and M1W is required to explain its reasons for not accepting those suggestions. (CEQA Guidelines §15088(c).) The new alternative scenarios presented in Appendix M provide no basis for the Draft SEIR's continued reliance on unsecured and speculative water rights. By failing to explain why the Draft SEIR should not be revised to assume that these sources of water are unavailable, the Final SEIR frustrates CEQA's informational purpose and renders the SEIR legally inadequate. (See *Flanders Found. v City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v City Council* (1983) 143 Cal.App.3d 1013, 1020.)
- The Final SEIR continues to overlook the availability of water supplies during drought years. (Responses to Comments VV-100 to VV-101.)
 - Cal-Am Comments VV-100 to VV-101 expressed concern that the Draft SEIR and specifically Draft SEIR Appendix I (Schaaf & Wheeler 2019 memorandum evaluating source water availability) only evaluated a single year of drought.
 - Responses to Comments VV-100 to VV-101 do not respond to this concern. Instead, these responses assert that prolonged drought conditions were evaluated. This is inaccurate. The Draft SEIR Appendix I conducted its evaluation of municipal wastewater based on the average of years 2009–2013 for treated municipal wastewater, which only included one drought year. (Draft SEIR Appendix I, p. 5.) This analysis is deficient because the CEQA Guidelines require the Draft SEIR to evaluate if there is sufficient water available for reasonably foreseeable future development in normal, dry and multiple dry years.

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(CEQA Guidelines, Appx. G, § XIX(b).) The Final SEIR response ignores this requirement and Cal-Am's comments. Further, Appendix M assumes that there will be adequate water supply during drought years because the Expansion will build a "drought reserve" during normal/wet years. (Appendix M, p. 9.) However, Appendix M fails to explain how this process of "banking" excess supply will occur or how much would be stored in a given normal/wet year. Moreover, it is unclear whether the banked reserve would be adequate for the Expansion under a multi-year drought or a multi-year severe drought, as is common in California. Thus, the Final SEIR fails to adequately evaluate and disclose potential water supply impacts, and the response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.

- The Final SEIR does not provide an accessible summary of the quantity of water expected to be generated from each analyzed source. (Responses to Comments VV-102 to VV-105.)
 - Cal-Am Comments VV-102 to VV-105, explained that the Draft SEIR failed to identify the quantity of water expected to be obtained from each water source or where such information can be found. Cal-Am explained that this information is necessary for M1W to demonstrate how available source water is sufficient for the Expansion and the already approved PWM/GWR Project to meet their maximum outputs.
 - Responses to Comments VV-102 to VV-105 do not respond to this concern. Rather than provide the public with clarity as to the constituent quantities of source water availability, the Final SEIR frustrates public review of the Expansion by once again altering the water supply estimates provided. For example, estimated Reclamation Ditch water available to the Expansion decreased from 1,014 afy in the Draft SEIR to 808 afy in the Final SEIR as a result of a conflicting estimate provided in Appendix M. Additionally, the quantity of secondary effluent source water relied upon has dramatically increased since the Draft SEIR was published. More concerning, the Final SEIR now relies on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. (Compare Final SEIR, p. 777 [Appendix M, Table 2] with Draft SEIR Appendix I, Table 8.) M1W has not explained how or why this increase has occurred.

This critical information was not subject to public review and comment and should be recirculated and evaluated to determine if potential significant environmental impacts may occur. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (*Id.*) By once again altering the sources and supplies purportedly

available to the Expansion, M1W has precluded meaningful public review and comment. (*Save Our Peninsula Comm.*, *supra*, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)

IV. OTHER CONSIDERATIONS

A. Growth Inducement

- Final SEIR continues to rely on MPWMD staff’s flawed supply and demand estimates in analyzing the Expansion’s growth inducing impacts and thereby fails to assess any potential for the Expansion to cause adverse growth impacts. (Responses to Comments VV-106 to VV-107.)
 - Cal-Am Comments VV-106 to VV-107 raised concerns regarding the Draft SEIR’s reliance on the Initial Stoldt Memo in assessing the Expansion’s potential for inducing significant population growth on the Monterey Peninsula. Cal-Am noted that both MPWMD staff’s demand estimates and the Draft SEIR’s reliance on those estimates were wholly unsupported, and therefore the Initial Stoldt Memo could not constitute substantial evidence for purposes of analyzing growth inducement impacts. As such, Comment VV-107 requested that the SEIR’s growth inducement analysis be revised to remove any reliance on MPWMD staff’s estimates.
 - Final SEIR Responses to Comments VV-106 to VV-107 fail to address the flaws in population growth estimates from MPWMD staff, and simply state that as a CEQA lead agency, M1W “can choose to rely on facts, data, and analysis provided by experts. . . .” The Final SEIR makes no attempt to provide additional substantial evidence in support of its population growth assessment, but instead refers back to Master Response #3, the Updated Stoldt Memo at Appendix O that was not available to the public during the comment period, and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous flaws in MPWMD staff’s estimates that are raised by various commenters, but instead dismisses these flaws as “differences of opinion.” The Final SEIR’s analysis of growth inducing impacts continues to improperly rely on Mr. Stoldt’s estimates, which are not supported by substantial evidence, and the response also does not satisfy the requirements of CEQA Guidelines Section 15088. Moreover, as explained by Cal-Am and other commenters, the unrealistic and inaccurate analysis by MPWMD underestimates current and future demand for water on the Monterey Peninsula. Should population growth and resulting future demand exceed the projections put forward by MPWMD staff and adopted by the SEIR, the Expansion would not produce sufficient water to satisfy demand, and would harm Peninsula cities by actually inhibiting planned growth. (See Section III.L, *supra*.) Reliance on Mr. Stoldt’s inaccurate estimates therefore results in an undisclosed impact related to

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population growth that the SEIR fails to analyze, requiring recirculation. (CEQA Guidelines, § 15088.5, subd. (a).)

- Final SEIR fails to analyze the Expansion as a cumulative project with the MPWSP with respect to growth inducing impacts. (Responses to Comments VV-108 to VV-109.)
 - Cal-Am Comments VV-108 to VV-109 requested that the SEIR be revised to assess the cumulative growth inducing effects resulting from the concurrent operation of the Expansion and the MPWSP. Because the Expansion could be implemented simultaneously with, or in short succession of, the MPWSP, an increase in water supply from the Expansion combined with water supplied by the MPWSP would result in cumulative population growth effects beyond those analyzed in the Draft SEIR. As such, CEQA requires the SEIR to analyze the cumulative growth inducing impacts of the Expansion. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)
 - Final SEIR Responses to Comments VV-108 to VV-109 do not respond directly to Cal-Am’s concerns, but refer back to Master Response #4 regarding the adequacy of the SEIR’s cumulative impacts analysis. The Final SEIR also maintains that the Expansion is not an alternative water supply to the MPWSP—therefore, the Expansion must be considered a cumulative project implemented simultaneously with the MPWSP and must be analyzed as such. While Final SEIR Master Response #4 asserts that the Expansion “is not expected” to operate concurrently with the MPWSP, it would be unreasonable to expend significant funds on development of the Expansion, only to mothball that water supply when the MPWSP comes online. CEQA requires the analysis of reasonably foreseeable environmental consequences (CEQA Guidelines, § 15126; *Laurel Heights, supra*, 47 Cal.3d at 396), and it is reasonably foreseeable that the Expansion would not be mothballed given that it would provide a water supply to a region where water resources are scarce. Therefore, the SEIR must evaluate the impacts of that increase in supply *in addition to* any potential growth impacts caused by the MPWSP. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).) The Final SEIR attempts to avoid a complete analysis of the Expansion’s growth inducing impacts by unreasonably arguing that the Expansion is not a cumulative project with the MPWSP. (See Section I, *supra*.)

B. Alternatives

- See Section I, *supra*, for a discussion of the Final SEIR’s failure to evaluate the MPWSP as a water supply project alternative to the Expansion. (Responses to Comments VV-110 to VV-115.)

V. RECIRCULATION

- The Draft SEIR was missing critical data and analysis of the Expansion’s potential impacts as a standalone project, as well as impacts that may occur if the Expansion and the MPWSP are developed cumulatively. Appendix M has dramatically increased the

quantity of secondary effluent source water relied upon by the Expansion from what was contemplated in the Draft SEIR, and has not explained how or why this change occurred. This critical information was not subject to public review and comment. By including last minute information about new water rights and sources purportedly available to the Expansion, M1W has rendered the Draft SEIR substantively inadequate and deprived the public of meaningful review and comment. (CEQA Guidelines § 15088.5; *Save Our Peninsula Comm.*, *supra*, 87 Cal.App.4th at 131.) The SEIR must be revised and recirculated for additional comment in order to address this significant deficiency, as well as the numerous deficiencies identified above. (CEQA Guidelines § 15088.5.)

VI. THE EXPANSION IS NOT ENOUGH TO LIFT THE CDO

The Final SEIR errs in relying on MPWMD staff's supply and demand conclusions that "[1] the Proposed Modifications can meet the long-term needs of the Monterey Peninsula; [and] [2] the Proposed Modifications would be sufficient to lift the State Water Board Cease and Desist Order." (Final SEIR, p. 3-7.) These conclusions are inconsistent with the findings, decisions, and standards of the regulatory agencies with subject matter jurisdiction over the issues—the CPUC and SWRCB. Cal-Am remains concerned that the Expansion will not supply enough water to meet the needs of the Monterey Peninsula to allow lifting of the CDO.

The CPUC, as part of its extensive review and approval of the MPWSP, specifically addressed the water demand projections for the Monterey Peninsula. The CPUC had "a considerable record" of the numerous parties' water demand projections for the Monterey Peninsula. (See CPUC Dec. 18-09-017, § 4.2.1, p. 24; See also *id.* at pp. 24-33.) The CPUC also reviewed and assessed the water supply available to Cal-Am to serve the Monterey Peninsula, including information relating to the Expansion, and concluded that even if the Expansion were considered a source of supply for Cal-Am, Cal-Am would still have a water supply deficit. (*Id.* at § 4.3, pp. 40-42.) Thus, the Expansion alone is insufficient to meet the Peninsula's long-term water demands.

Finally, Cal-Am has substantial concerns that the Expansion's water supply will be insufficient to allow for lifting of the CDO. In order for the CDO to be lifted: (1) Cal-Am must certify to the SWRCB, "with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River;" and (2) the SWRCB's Deputy Director of Water Rights must concur with Cal-Am's certification. (SWRCB Order 2016-016, Condition 15 at p. 27.) Cal-Am has expressed its significant concerns and disagreement with the supply and demand analysis relied upon by M1W, and those concerns have not been addressed. Moreover, insufficient evidence has been provided concerning the ability of the Expansion to act as a permanent supply of water. Cal-Am is also concerned that any reliance on the Expansion to replace Carmel River diversions may violate the California Safe Drinking Water Act. Health and Safety Code section 116555 requires that "[a]ny person who owns a public water system shall ensure that the system . . . [p]rovides a *reliable and adequate* supply" of water. (H&S Code, § 116555(a)(3) [emphasis added].) And if any of the Expansion's source waters are not available on a permanent and adequate basis, there is an even greater risk that the Expansion will not be able to provide an adequate and reliable water supply sufficient to remove the CDO and satisfy Health and Safety Code section 116555.

Supplemental Information from Monterey One Water Staff in Response to Latham and Watkins Letter Dated 4/24/2020

	Latham and Watkins/ Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response
	Cover Letter	
1	On behalf of California-American Water Company (“Cal-Am”), we submit this letter in response to Agenda Item #7-C for Monterey One Water’s (“M1W”) April 27, 2020, Board of Directors Meeting, concerning the Final SEIR for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (“Expansion”). As you know, Cal-Am is currently in the permitting process for the Monterey Peninsula Water Supply Project (“MPWSP”) in order to provide a safe, reliable, and drought-proof alternate water supply to Cal-Am’s customers on the Monterey Peninsula in response to the State Water Resources Control Board’s Cease and Desist Order (“CDO”). Because this Board consistently has described the Expansion as a “back-up” to the MPWSP, Cal-Am has monitored the Expansion closely for its potential implications to the water supply issues affecting the Peninsula. As expressed in Cal-Am’s comments on the Draft SEIR, Cal-Am has serious concerns about the SEIR’s adequacy and the Expansion’s overall feasibility. Cal-Am believes that its concerns have not been addressed in the Final SEIR, and that both the SEIR and the Expansion remain fundamentally flawed. Therefore, and for the reasons provided below, Cal-Am is requesting that this Board vote to deny the Expansion and decline to certify the SEIR.	See specific responses below; comment referred to decisionmakers for their consideration.
2	Cal-Am submitted a detailed comment letter on the Draft SEIR on January 30, 2020, which provided 280 pages of evidence demonstrating material inadequacies in M1W’s California Environmental Quality Act (“CEQA”) analyses. The Final SEIR, released on April 13, 2020, failed to resolve these substantial issues, as set forth in further detail in Attachment A hereto. We have briefly summarized the Final SEIR’s most serious flaws below.	See specific responses below.
3	First, the Final SEIR entirely fails to evaluate the Expansion either as an alternative to or cumulative project with the MPWSP. If the Expansion is to be considered a replacement for the MPWSP—which has been suggested by certain regulatory agencies, including the California Coastal Commission—then the SEIR must evaluate the Expansion as an alternative water supply project to the MPWSP. (See CEQA Guidelines, § 15126.6.) The Final SEIR does not undertake this critical analysis. Further, as part of its proceedings on the MPWSP (of which M1W was a party), the California Public Utilities Commission (“CPUC”) requested that the Expansion be analyzed as an addition or supplement to the MPWSP. This cumulative projects analysis still has not been conducted. Instead, the Final SEIR takes the unreasonable position that if both projects are built, the Expansion would be turned off such that the projects would not operate at the same time. Such a position flies in the face of CEQA’s obligation that reasonably foreseeable environmental impacts must be analyzed and disclosed. (CEQA Guidelines, § 15126; Laurel Heights Improvement Assn. v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376, 396.).	The MPWSP is addressed as a cumulative project, however, the SEIR assumes that the Proposed Modifications would not operate if the MPWSP desalination project were operating pursuant to M1W Board Resolution 2019-19. Two projects would not need to operate at the same time to satisfy the same water supply demand. The MPWSP is not an alternative to the Proposed Modifications because it is not a feasible option to meet the project objectives and it does not reduce significant environmental impacts as presented in Final SEIR Chapter 3, Master Response #5 (hereafter referred to as “MR#5”)

Supplemental Information from Monterey One Water Staff in Response to Latham and Watkins Letter Dated 4/24/2020 (continued)

	Latham and Watkins/ Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response
4	Second, the Final SEIR still fails to evaluate fully the Expansion's potential impacts to biological resources, geology, hazards, hydrology and groundwater, land use planning and agricultural resources, noise and vibration, population and housing, water supply, and cumulative impacts. The Final SEIR also continues to improperly defer mitigation for energy impacts, and fails to support its air quality impact conclusions with substantial evidence.	See specific responses to each of the comments below for the topics listed.
5	Third, the Final SEIR fails to meaningfully respond to Cal-Am's comments regarding insufficient source waters to operate the Expansion and the already approved Pure Water Monterey Groundwater Replenishment Project ("PWM/GWR Project"). Cal-Am provided M1W with expert analysis prepared by Dudek (Exhibit A to Cal-Am's January 30, 2020, comment letter) that addresses the Draft SEIR's failure to document the quantity and reliability of the source waters purportedly available to serve the Expansion. Cal-Am also requested that M1W specifically identify the quantity of water expected to be obtained from each water source or where such information can be found. Rather than address Cal-Am concerns on individual source waters or provide the public with clarity as to specific quantities of source waters that are available, the Final SEIR frustrates public review by wholly altering the water supply estimates provided with the Draft SEIR.	The Final SEIR provides a good faith, reasoned response to comments about wastewater and new source waters. The public has been provided the technical analysis that supports the SEIR's conclusions in the Draft SEIR and in the Final SEIR those analyses are clarified and amplified; namely that under all potential future hydrologic and ARWRA conditions, there would be sufficient M1W rights to municipal wastewater and new source waters to meet the yield for the approved PWM/GWR Project and the Proposed Modifications. If the M1W Board chooses not to use its rights to municipal wastewater for the Proposed Modifications, the Board may use those water rights for other future recycled water demand.
6	Specifically, the new Source Water Operation Plan Technical Memorandum attached as Appendix M to the Final SEIR dramatically increased the quantity of secondary effluent source water from what was considered in the Draft SEIR. As a result, the Final SEIR claims that many of the individual water sources evaluated in the Draft SEIR are no longer required for the Expansion to operate. The Final SEIR and Appendix M do not explain how the vast quantity of secondary effluent suddenly became available or why such sources were not considered previously. By including last minute information about new water rights and sources purportedly available for the Expansion, M1W has rendered the Draft SEIR inadequate and deprived the public of meaningful review and comment. Recirculation is now required. (CEQA Guidelines § 15088.5; Save Our Peninsula Comm. v Monterey County Bd. of Supervisors (2001) 87 Cal.App.4th 99, 131.)	It is true that under the scenarios presented in Appendix M, the analysis shows that M1W would use more of its rights to municipal wastewater flows than it had assumed would be needed in Appendix I. The analysis was conducted to show that even if new source waters were available only to the approved PWM/GWR Project and not for meeting increased demands of the expanded PWM/GWR Project, there would still be waters available to use at the M1W Board's discretion. If the M1W Board chooses to not use the agency's rights to wastewater or new source waters until one or more future undefined projects are implemented, then the excess secondary effluent

Supplemental Information from Monterey One Water Staff in Response to Latham and Watkins Letter Dated 4/24/2020 (continued)

	Latham and Watkins/ Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response
		that would have been used for the Proposed Modifications will continue to flow as secondary effluent to the Monterey Bay. Currently, approximately 9,000 AFY flows to the Monterey Bay, and the Proposed Modifications would reduce the amount of discharge to the Bay by approximately 1,300 to 1,800 AFY compared to the existing conditions plus approved PWM/GWR Project. The amount of discharge reduction would depend upon water year type and MCWRA and MCWD use of their secondary effluent rights. In addition, M1W would not necessarily need to divert, treat, and recycle new source water, such as impaired surface waters in the Blanco Drain and Reclamation Ditch, in which case those flows would also continue to be discharged to surface waters including indirectly to the Monterey Bay. This new information clarifies, amplifies, and adds to the environmental analysis, but does not result in depriving the public of meaningful review and comment. No new significant impacts and no worsening of previously identified significant impacts resulted; no new mitigation nor alternatives were presented that would be feasible, but which M1W declines to implement.
7	Further, Appendix M acknowledges that the Expansion would reduce the availability of recycled water for anticipated future demands of the Castroville Seawater Intrusion Project ("CSIP"). However, no analysis was provided on the loss of these source waters to the CSIP or the effect on implementation of the Sustainability Goals of the Salinas Valley Basin Groundwater Sustainability Agency's ("SVBGSA") Groundwater Sustainability Plan ("GSP"), adopted on January 9, 2020. The GSP's Sustainability Goals include management of	The PWM/GWR Project with the Proposed Modifications would still make available new source waters for use by the CSIP system increasing its overall yield by 2,858 AFY ¹ or more, if the ARWRA conditions precedent in section 16.15 are met. The M1W Board maintains its ability to

¹ This number will vary depending upon future surface water and wastewater flows, CSIP and SVRP system improvements, CSIP demands, funding provided, and whether the conditions precedent in ARWRA 16.15 are met. Appendix I of the Draft SEIR presents the minimum new yield of 2,858 AFY based on the Schaaf & Wheeler flow balance methodology and assumptions. Appendix R of the Final SEIR presents other yield estimates based on M1W rights not used for the PWM AWPf being used for CSIP.

Supplemental Information from Monterey One Water Staff in Response to Latham and Watkins Letter Dated 4/24/2020 (continued)

	Latham and Watkins/ Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response
	groundwater and other available water resources in the 180/400-Foot Aquifer Subbasin for long-term community, financial, and environmental benefits. To achieve this, the GSP contemplates expansion of recycled water use within the CSIP and other areas and efforts to prevent further seawater intrusion. The Expansion will frustrate the GSP's goals by reducing recycled water available to the CSIP. By reducing deliveries to the CSIP, the Expansion will cause increased and continued pumping of groundwater and promote conditions that facilitate rather than retard seawater intrusion. The Final SEIR is inadequate because it does not include a consistency analysis of the Sustainability Goal of the GSP and for failing to evaluate and disclose reasonably foreseeable environmental impacts that could result from the reduction in recycled water deliveries. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)	grant (through agreements or contract) its rights to municipal wastewater and new source water in the future to increase recycled water production for CSIP. The 180-/400-ft GSP goals can be met regardless of the implementation of the Proposed Modifications, since meeting those goals can occur by implementation of a number of water supply and groundwater management measures presented in the GSP most of which do not depend upon the excess winter effluent and M1W rights to wastewater assumed available for the Proposed Modifications. All projects to utilize more recycled water for irrigation require a new source of funding for infrastructure improvements to the SVRP and/or CSIP systems. The M1W Board will continue to have discretion about use of its rights to municipal wastewater and new source waters.
8	Finally, the Final SEIR fails to support its conclusions about water supply and demand with substantial evidence. Unlike the CPUC's supply and demand determinations, which were based on six years of review and voluminous evidence submitted under oath by multiple parties (including M1W), the Final SEIR only relies on estimates prepared by Dave Stoldt, General Manager of MPWMD. Mr. Stoldt bases his estimates on numerous inaccurate assumptions, and his most recent evaluation was added to the Final SEIR without any public review. (See Final SEIR, Appendix O ["Updated Stoldt Memo"]). Like his prior estimates attached to the Draft SEIR (the "Initial Stoldt Memo"), the Updated Stoldt Memo continues to ignore the growth projections provided by individual cities in Cal-Am's service area, selectively choosing its own projections. Contrary to the Final SEIR's conclusions and attempts to bolster Mr. Stoldt's credibility, Mr. Stoldt's estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].)	M1W has provided the information in Appendices N, O, and P and in the comment letter from Latham and Watkins (letter VV) on the Draft EIR. The Water Management District's Supply and Demand report presents facts supporting its conclusions, and also presents the analysis of an expert in the field based on those facts. As such, the Water Management District's report meets the CEQA definition of "substantial evidence." The M1W Board of Directors can rely upon the Water Management District's Supply and Demand Report, the information provided Letter VV, or a combination of the two.
9	Given Cal-Am's commitment and responsibility to secure safe, reliable and drought-proof water for its customers and comply with the CDO, Cal-Am cannot support a water supply project with such significant unanswered questions and considerable evidence demonstrating it is not feasible. Cal-Am is particularly concerned about the ability of the	The project would provide a new water supply that would increase the water available to Cal-Am customers during the time period when Cal-Am is required to reduce its diversions from the Carmel

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	Expansion to provide an adequate and reliable water supply sufficient to satisfy the requirements for lifting the CDO. Accordingly, for the reasons summarized above and detailed in the attachment to this letter, Cal-Am respectfully requests that the Board deny the Expansion and decline to certify the Final SEIR.	River. The CDO requires Cal-Am to reduce its unauthorized diversions and the Proposed Modifications would be able to do that in absence of an operational MPWSP desalination project. As discussed throughout the Final SEIR, the Proposed Modifications would operate in the event that the MPWSP desalination is not operating to deliver the water needed to meet the requirements of the CDO. According to the MPWMD, the Proposed Modifications would provide water to meet the CDO and provide for growth.
	Section I (Attachment A, starting at page A-1)	
10	Cal-Am Comments VV-3, VV-4, and VV-110 to VV-115 identified the Draft SEIR's failure to analyze the MPWSP as a cumulative project or an alternative. The Draft SEIR did not contemplate the cumulative impacts of both the Expansion and the MPWSP being implemented concurrently or in short succession. Further, given that the Expansion's sponsors intend that it serve as an alternative to the MPWSP—and not as a true back-up to the MPWSP—the Draft SEIR should have analyzed the MPWSP as an alternative to the Expansion to achieve Peninsula water demands.	M1W Board Resolution 2019-19 stated “prior approval of proceeding with the initial environmental, permitting and design work for the potential expansion of the Pure Water Monterey Project was done specifically as a backup plan to, and not as an option in the place of, the Cal-Am desalination project.” The SEIR provides the public with information and analysis of the project as such and pursuant to CEQA. The Notice of Preparation presented it as such and no comments to change that assumption were provided during the public scoping period. The MPWSP desalination project is not a CEQA alternative to the Proposed Modifications because it does not meet the project objectives and would not reduce significant impacts of the Proposed Modifications. Regardless, the Final SEIR provides the requested alternatives analysis in MR#5 that compares the impacts of the Proposed Modifications with the impacts of the MPWSP desalination project. The cumulative analysis considers the MPWSP desalination and the Proposed Modifications being constructed simultaneously, but there would be no

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		need to simultaneously operate both the Proposed Modifications and the MPWSP desalination project to deliver water for the same purpose or to meet the same demands. That would be akin to delivering 2 acre-feet of water when only 1 acre-foot is needed. Additional information in response to these issues is found in the Final SEIR, Chapter 3, Master Responses #4 and #5, (hereafter referred to as MR#4 and MR#5, respectively).
11	Cal-Am Comments VV-3, VV-4, and VV-110 to VV-115 identified the Draft SEIR's failure to analyze the MPWSP as a cumulative project or an alternative. The Draft SEIR did not contemplate the cumulative impacts of both the Expansion and the MPWSP being implemented concurrently or in short succession. Further, given that the Expansion's sponsors intend that it serve as an alternative to the MPWSP—and not as a true back-up to the MPWSP—the Draft SEIR should have analyzed the MPWSP as an alternative to the Expansion to achieve Peninsula water demands.	The MPWSP is a cumulative project and is evaluated as such for construction impacts, but as discussed in MR#4 and the prior comment, it is not reasonable to assume that both the Proposed Modifications and the MPWSP desalination project would operate at the same time to deliver water for the same demands. To reiterate the information in MR#5 and the previous comment, the MPWSP desalination project is not a CEQA-required alternative to the Proposed Modifications, because the MPWSP is not a feasible option for M1W to meet the same project objectives while reducing significant impacts of the Proposed Modifications.
12	First, it is reasonably foreseeable that the Expansion could be pursued as a water supply project alternative to the MPWSP. In its October 28, 2019, staff report on the MPWSP, the California Coastal Commission specifically identified that the Expansion could be pursued as an alternative to the MPWSP. As such, the SEIR must evaluate the Expansion as an alternative to the MPWSP – which it has failed to do. (See CEQA Guidelines, § 15126.6.)	The comment states that the CA Coastal Commission staff considers the Proposed Modifications to be an alternative to the MPWSP Desalination Project. M1W, as lead agency for this SEIR, is not required to consider the MPWSP Desalination Project as an alternative to its proposed project under CEQA. See above, M1W did not consider the MPWSP desalination project to be an alternative because it did not feasibly meet most of the objectives and would not reduce the significant environmental impacts of the Proposed Modifications evaluated in the CEQA

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		document. Regardless, the Final SEIR does provide an analysis in MR#5 that compares the impacts of the two projects to be responsive to comments from Latham and Watkins in letter VV.
13	Second, if the Expansion and MPWSP are not alternative water supply projects, then it is reasonably foreseeable that both could operate concurrently, in short succession, or collectively take place over the same period of time, and thus, are cumulative projects. (See CEQA Guidelines, §§ 15130, subd. (b)(1)(A), 15355, subd. (b).) The Final SEIR acknowledges the MPWSP as a cumulative project for purposes of construction-related cumulative impacts (Final SEIR, p. 3-23), but still fails to evaluate the operational-related cumulative impacts and claims that no such impacts would occur. (Id., p. 3-22.) Further, the Final SEIR's position that the Expansion is not a cumulative project ignores the practical reality that it makes little sense to undertake the significant expense of moving forward with the Expansion if it would stop operating the moment the MPWSP begins running. Omitting an analysis of reasonably foreseeable impacts violates CEQA's basic requirements. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)	As discussed above, the cumulative analysis considers the MPWSP desalination and the possibility of the Proposed Modifications being constructed simultaneously, but there would be no need to simultaneously operate both the Proposed Modifications and the MPWSP desalination project together (i.e. simultaneously) to deliver water for the same purpose or to meet the same demands. For this reason, operating the two projects together was not evaluated in the cumulative analysis. If there would be a condition in the future wherein the MPWSP desalination project as approved by the CPUC in its decision #18-09-017 (6.4 mgd to deliver 6,252 AFY to meet its Monterey District demands) and the Proposed Modifications to provide 2,250 AFY to the same urban water customers would both be necessary, an additional CEQA review would be required. The total water supply available to this area would be more than 17,000 AFY where actual demands for the service area have averaged 9,825 AFY for the past five years and 9,817 AFY for the past three years. Such a future scenario appears to be unlikely.
14	In addition to violating CEQA's basic requirements, the Final SEIR's responses to Cal-Am's comments on these issues do not satisfy the requirements of CEQA Guidelines Section 15088, which require a good faith, reasoned response to the significant environmental points raised.	The public has been provided the technical work that supports the SEIR's conclusions; the analysis and information provided constitute a good faith, reasoned response to significant environmental points. See above for additional information about why responses provided a good faith reasoned response.

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15	II. Project Description Final SEIR fails to demonstrate that the Expansion is capable of meeting its own Project Objectives. (Responses to Comments VV-5, VV-8 to VV-8b.)	<p>The SEIR shows that the Proposed Modifications would meet the project objectives if all components are implemented. The M1W Board has discretion to implement a project that would increase the yield of the PWM/GWR Project. The Proposed Modifications may be feasible if adequate funding is available to construct and operate them.</p>
16	<p>Cal-Am Comment VV-5 and VV-8b requested that the SEIR be revised to explain how delays in the completion and operation of the already approved Pure Water Monterey Groundwater Replenishment (“PWM/GWR”) Project may impact the Expansion’s ability to meet its Project Objectives. The Final SEIR dismissed Cal- Am’s concerns alleging that the ability of the Expansion to meet the stated Project Objectives is unrelated to any construction delays for the already approved PWM/GWR Project. Moreover, Master Response to Comment #6 admits that it is “unlikely” that the Expansion can be completed by December 31, 2021, the date by which Cal-Am must achieve the Cease and Desist Order’s diversion limitations applicable to the Carmel River. Master Response to Comment #6 further admits “that is currently not possible to estimate when the [Expansion] will be completed.” Given this uncertainty, it is doubtful that the Expansion is capable of meeting its stated objective of “commencing operation, or being substantially complete, by the end or 2021 or as necessary to meet Cal-Am’s replacement water needs.” If the Expansion is unable to meet stated Project Objectives, MIW should find that the project is infeasible and select an appropriate alternative.</p>	<p>This comment suggests that a new water supply project would need to be operating to deliver water to the Cal-Am Monterey District no later than December 31, 2021 to meet the Cease and Desist Order requirements. It appears that this comment is stating that if a project, such as the Proposed Modifications, does <u>not</u> operate by December 31, 2021, then Cal-Am would <u>not</u> meet its requirements to comply with the Cease and Desist diversion limitations applicable to the Carmel River. At this time, the SEIR assumes that the Proposed Modifications could be completed “as necessary to meet Cal-Am’s replacement water needs” for the Carmel River if M1W chooses to implement the Proposed Modifications. M1W can only precede to implement in a timely manner if funding is available and thus, may not have the means to implement the Proposed Modifications without MPWMD or CalAm funding.</p>
17	<p>Cal-Am Comments VV-8 to VV-8b explained that the CPUC determined that Cal-Am’s replacement water needs were 14,000 AFY, and requested that the Draft SEIR be revised to address the CPUC’s evaluation of supply and demand. The Final SEIR asserts that because the CPUC did not prepare its own water supply and demand evaluation, the CPUC’s demand determination of 14,000 AFY has no bearing. (See D.18-09-017, p. 171.) The Final SEIR ignores that the CPUC made its 14,000 AFY determination based on evidence presented from multiple parties – including M1W – and that M1W does not have authority to divest the CPUC of its exclusive jurisdiction over public utilities and declare a new demand</p>	<p>M1W, as the CEQA lead agency for the SEIR, has the ability to rely upon substantial evidence as defined by CEQA to analyze a proposed project’s environmental impacts. In this case, M1W is not proscribing use of any demand estimate for the CPUC, Cal-Am, or local governments, M1W does not have purview for these decisions. MPWMD as project partner is responsible for water planning</p>

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	<p>requirement. (See Pub. Util. Code, § 761, 1001.) Rather than addressing these issues, the Final SEIR defers to David Stoldt’s supply and demand analysis in Appendix O of the Final SEIR – which is an analysis that M1W itself did not prepare. Contrary to the Final SEIR’s conclusions, the unvetted and unsubstantiated estimates from Mr. Stoldt do not constitute substantial evidence in support of the SEIR’s conclusions. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].) Appendix O cannot constitute substantial evidence upon which the SEIR may rely.</p>	<p>for the Monterey Peninsula (Monterey District main system). M1W therefore, uses its project partners’ analysis as the most recent, accurate, and relevant information available about water supply and demand to support the analysis of growth inducement and associated environmental impacts. This conservative assumption ensured that the amount of growth enabled by the proposed modifications is not underestimated, impacts are conservatively assumed to occur due to new growth enabled by increased adequate water supply for growth, and these recent data and facts that undeniably constitute substantial evidence upon which the SEIR may rely. It appears that there is a difference of opinion; however, differences of opinion do not render an EIR to be inadequate.</p>
18	<p>Cal-Am Comments VV-7 to VV-7g explained that the SEIR cannot rely on the estimates of a single person—Mr. Stoldt—to support its conclusions regarding the feasibility of the Expansion. Cal-Am identified the significant flaws underlying Mr. Stoldt’s assumptions, and noted that the SEIR should instead rely on the CPUC’s determinations, which were based on evidence submitted under oath by multiple parties. In particular, Cal-Am identified that Mr. Stoldt selectively utilized growth projections intended to achieve his desired water demand estimates, ignoring the higher growth and future water supply projections from individual cities in Cal-Am’s Monterey District service area.</p> <p>The Final SEIR fails to provide substantial evidence supporting its water supply and demand conclusions. Instead, the Final SEIR refers to Master Response #3, a revised version of Mr. Stoldt estimates at Appendix O—which was not available to the public during the comment period—and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous material flaws that Cal-Am (and others) identified in Mr. Stoldt’s prior estimates, dismissing these flaws as “differences of opinion.” Contrary to the Final SEIR’s conclusions, the unvetted and unsubstantiated estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR’s conclusions. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or]</p>	<p>M1W staff considers the information presented in Appendices N, O, and P as meeting the CEQA definition of “substantial evidence.” M1W staff has not received alternative or corrected information that disputes the information in these Appendices; if such inaccuracies exist, M1W staff would be more than happy to include it in the record. The existence of alternative data or facts, however, would not render the SEIR to be inadequate. These comments do not suggest new mitigation or alternatives that would substantially lessen any of the significant environmental impacts. For these reasons, the growth inducement analysis in the Draft SEIR remains fully compliant with CEQA regardless of the differences of opinion related to the substantial evidence presented in the SEIR.</p>

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	evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].)	
19	Cal-Am Comment VV-9 explained that the Draft SEIR failed to evaluate potential impacts to agricultural water supplies due to a significant reduction (16%) in available agricultural irrigation water as a result of the Expansion. Specifically, Cal-Am Comment VV-9 pointed out that the Draft SEIR explains that, under the Expansion, there would be 700 to 800 afy less water available for agricultural irrigation than under the previously approved PWM/GWR Project. (Draft SEIR, pp. 2-11 to 2-12.) Comment VV-9 was based on analysis by Dudek in a memorandum attached to Cal-Am’s comments (see Dudek Comments VV-148 to 149), which found that the Draft SEIR “makes no attempt to assess the proposed changes in agricultural water deliveries, and instead defaults to a ‘no project’ baseline to draw conclusions on the significance of impacts.”	The public has been provided the technical work that supports the SEIR’s conclusions; the analysis that shows that the PWM/GWR Project will continue to be capable of increasing water available to CSIP for irrigation. The conditions precedent in ARWRA section 16.15 have not been completed to date such that the new source waters could serve as a source of augmentation of MCWRA rights to wastewater. M1W currently possesses rights to use new source waters that it has implemented in partnership with the City of Salinas, MPWMD, and MCWRA. M1W also possesses rights to municipal wastewater under California Water Code Section 1210, that provides M1W the ability to give those rights to other entities through contract. The ARWRA with MCWRA and prior agreements with Marina Coast Water District grant rights to municipal wastewater to those entities, and these agreements are described in detail in the Draft SEIR and reiterated in the Final SEIR (Chapter 3, Master Response #3, hereafter MR#3). The Draft SEIR and the Final SEIR present multiple potential future scenarios and assumptions to quantify potential changes in agricultural water deliveries.
20	Final SEIR Responses to Comments VV-9 and VV-148 to VV-149 fail to respond to this specific comment or the analysis provided by Dudek, and instead refer to the 16-page Master Response #3. While Master Response #3 addresses the availability of agricultural wash water, Master Response #3 fails to address the environmental impacts associated with reduced availability of agricultural irrigation water under the Expansion, beyond acknowledging that the Expansion Project would reduce the future beneficial increases of recycled water for the CSIP. Therefore, the Final SEIR response is inadequate and does not	The public has been provided the technical work that supports the SEIR’s conclusions that there would not be a new significant impact nor a worsening of severity of a significant impact related to agricultural irrigation. CSIP yield discussion is included in MR#3 starting at page 3-17. The Proposed Modifications would not reduce the ability of SVRP and CSIP to use the MCWRA

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	satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.	rights to wastewater flows, nor to participate in the New Source Waters project for the benefit of the CSIP system yield. The Proposed Modifications would not reduce agricultural irrigation water such that a significant environmental impact would occur; in fact, SVRP yield would increase provided M1W and MCWD continue to provide MCWRA portions of its rights to wastewater. See Appendix R of the Final SEIR that shows the increases possible in CSIP yield both with and without the Proposed Modifications. In all scenarios, CSIP yields would increase and M1W would continue to dedicate a large portion of their rights to MCWRA for CSIP.
21	Cal-Am Comment VV-10 explained that under the PWM Expansion Project, less municipal wastewater would be discharged through the ocean outfall. (Draft SEIR, p. 2-11.) Accordingly, Cal-Am Comment VV-10 requested that the SEIR be updated to assess how reduction in wastewater discharge would affect operations of the MPWSP in a cumulative project scenario, particularly in the context of ocean water quality.	As discussed previously, this SEIR assumes that operation of the Proposed Modifications would <u>not</u> occur if the MPWSP is delivering water for the same purpose. Therefore, changes to the wastewater discharge associated with the Proposed Modifications would not occur nor affect the operation of the MPWSP. See MR#4. The Proposed Modifications would not operate to deliver water to the Monterey Peninsula to meet the same demands as would be supplied by the MPWSP desalination project.
22	Final SEIR Response to Comment VV-10 fails to provide any specific response to Cal-Am's concerns, and instead refers to Master Response #4 regarding the adequacy of the SEIR's cumulative impacts analysis. Master Response #4 asserts that the Expansion "is not expected" to operate concurrently with the MPWSP, and therefore need not be analyzed as a cumulative project. However, as discussed above, the Final SEIR also asserts that the Expansion is not an alternative to the MPWSP, ignoring the fact that other government agencies view the Expansion as a potential alternative water supply to the MPWSP. The Final SEIR therefore attempts to avoid a complete analysis of the Expansion's impacts on ocean water quality as a result of reduced wastewater discharge by arguing that the Expansion is neither an alternative to nor a cumulative project with the MPWSP. The Final	See responses above and Final SEIR MR #4 and MR#5

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	SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088, and it fails to comply with CEQA's basic requirement that reasonably foreseeable impacts be analyzed. (CEQA Guidelines, § 15126, 15165; Laurel Heights, supra, 47 Cal.3d at 396.)	
23	Cal-Am Comment VV-11 and the Final SEIR's response relate to the Expansion's source water rights and the Draft SEIR's assumptions regarding certain conditions precedent in the Amended and Restated Water Recycling Agreement ("ARWRA"). The Final SEIR's inadequate response to these comments are addressed below in Section III.M.	See response below.
24	<p>A. Air Quality and Greenhouse Gases (1st major bullet). Final SEIR's utilization of "spreadsheet analysis" and outdated emission estimates fails to adequately disclose the Expansion's air quality impacts to the public and decisionmakers. (Response to Comments VV-13 to VV-18.)</p> <p>Cal-Am Comments VV-13 to VV-18 reasonably requested that the SEIR be revised to utilize the widely accepted CalEEMod air emissions model, to utilize the most up-to-date mobile source emissions model (EMFAC2017), and to adequately disclose air emission calculations, including underlying assumptions, to the public and decisionmakers. Cal-Am requested these revisions because the SEIR contains an out-of-date and opaque air emission assessment that precludes the public from cross-checking the calculations and analysis, depriving the public of key information.</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions regarding air quality in Appendix F (Attachment 1); the analysis has been made available for the public to cross-check the calculations by replicating the spreadsheet or using CalEEMod. This comment does not provide specific information about which assumptions or methods the commenter considers to be incorrect. The effect of using the new EMFAC2017 mobile emissions factor model was addressed previously and found that use of the new model would not affect overall emissions because it only applies to the mobile portion of the construction emissions that were much less than emissions from construction equipment or fugitive dust emissions. The expertise of the air quality consultant, James Reyff of Illingworth & Rodkin, Inc. is provided in Appendix P; M1W was relied upon for this SEIR. There is no requirement to use CalEEMod by the state or by the local air district. The response is a good faith, reasoned response that meets the CEQA standard in Section 15088. Importantly, MBARD reviewed the analysis and had no comments regarding the approach; this was the same approach used for previous EIR. CalEEMod is a model used to compute emissions from land use projects and was not designed to</p>

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		accurately predict fugitive dust emissions from construction projects. The fugitive dust analysis is enhanced and more accurate than it would have been if CalEEMod was used.
	<p>A. Air Quality and Greenhouse Gases (2nd major bullet). Cal-Am Comments VV-19 to VV-20 highlighted that the SEIR's air emissions calculations and assessment assumed a 6-foot trench width for pipelines despite the fact that some trenches would be up to 12-feet wide. Cal-Am reasonably requested that the SEIR be revised to assume a 12-foot trench width to properly calculate the Expansion's worst-case daily emissions, which is necessary for an accurate (apples-to-apples) comparison against MBARD's daily thresholds of significance. Despite admitting that a "12-foot wide trench could be constructed in some locations," Final SEIR Responses to Comments VV-19 to VV-20 fail to assume a 12-foot trench width and refuse to properly calculate worst-case daily emissions. Instead, these responses attempt to defend the SEIR's flawed air emission analysis by noting that the SEIR used an average trench width. This justification ignores that the pertinent MBARD thresholds are focused on the worst-case daily emissions from trenching activity, not emissions on an average day. The Final SEIR's failure to perform the proper worst-case emissions comparison results in a withholding of information from the public necessary to evaluate and verify the Expansion's actual environmental impact and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions; the emissions calculations do not need to be revised to assume that all trenches would be 12-feet wide when that is not an accurate assumption. The Draft SEIR does not need to assume a 12-foot width of trench for all trenches if there would only be the need for 12-foot wide trench in discrete areas. Construction of the RUWAP product water pipeline required less than 6-foot wide trench width for the vast majority of the pipeline alignment. The Draft SEIR analysis already contains worst-case assumptions because those assumptions would not be worse if a 12-foot wide trench was assumed. Trenching activities are not the highest emitting activities in a single 24-hour period (drilling activities or grading would be more intensive).</p> <p>Assuming a 12-foot wide trench would not change the result as daily worst-case PM10 emissions (because they only account for approximately one pound per day with either trench width). One must keep in mind that the trenching emission calculations are based on width, depth and length. Wider trenches take longer to construct; therefore, the length of trench constructed in a single day is shorter.</p>
25	<p>B. Biological Resources: Fisheries (1st major bullet). Final SEIR fails to assess impacts to fisheries associated with continued Carmel River withdrawals. (Responses to Comments VV-30 to VV-33.)</p> <p>Cal-Am Comments VV-30 to VV-33 requested that the SEIR address the impacts associated with a reasonably foreseeable scenario where Peninsula water demands exceed supply with</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions; the analysis shows that the Proposed Modifications would not result in increased Carmel River withdrawals. A new water supply to serve the same area as the</p>

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	<p>the Expansion and without the MPWSP, resulting in the need for additional Carmel River withdrawals.</p> <p>Final SEIR Responses to Comments VV-30 to VV-33 fail to provide the requested analysis of impacts to fisheries from additional Carmel River withdrawals and claim that the Expansion would not cause unauthorized Carmel River withdrawals. The Final SEIR justifies this conclusion by continuing to rely on the improper water demand estimates prepared by MPWMD staff, which are not supported by substantial evidence as discussed above.</p>	<p>Carmel River system aquifer, such as would be provided by the Proposed Modifications, would <i>reduce</i> Carmel River withdrawals. The Proposed Modifications would only result in a beneficial impact to fisheries.</p>
26	<p>B. Biological Resources: Fisheries (2nd major bullet). Final SEIR fails to assess impacts to fisheries associated with a reduction in irrigation water and increase in stormwater capture. (Response to Comment VV-34.) Cal-Am Comment VV-34 requested that the SEIR be revised to address how a reduction in irrigation water and increase in stormwater capture could affect fish habitat or populations (e.g. from runoff).</p> <p>Final SEIR Response to Comment VV-34 fails to provide the requested analysis, and instead states that the Expansion would not divert more source water than the analysis presented in the certified PWM/GWR Project Final EIR and that the diversion of stormwater and irrigation water is already entitled. Contrary to the Final SEIR Response to Comment VV-3, there are remaining questions regarding the source water for the Expansion and, as discussed further above in Section II regarding Response to Comment VV-9, the Final SEIR failed to analyze impacts associated with the Expansion's significant reduction in irrigation water supplies. The Final SEIR fails to support its conclusion that the Expansion would not divert more source water than evaluated in the PWM/GWR Project Final EIR. Accordingly, the SEIR fails to assess potentially significant impacts associated with a reduction in irrigation water and increase in stormwater capture, which could affect fish or habitat populations.</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions. The Approved PWM/GWR EIR assumed all available/allowable new source water (including storm water) would be diverted and that the AWPf and/or SVRP would use it or it would be discharged after primary and secondary treatment. Any reduction in CSIP or MCWD irrigation water use (or supplied by M1W) would be due to other reasons (not the Proposed Modifications) and would not adversely affect surface water flows or fisheries habitat. If SVRP or MCWD irrigation demands are reduced, it would not result in a commensurate reduction in surface water flows for fish habitat within the Reclamation Ditch because those volumes are combined irrigation water and precipitation (runoff) flows from areas outside of CSIP and MCWD areas. In the Reclamation Ditch, urban runoff, agricultural runoff and natural runoff is from a separate watershed than these entities' irrigation areas. The requirements to maintain fish flows and volumes within downstream water bodies relate only to use of Blanco Drain and Reclamation Ditch and State water rights permits limit MCWRA and M1W diversions to protect fisheries according to the existing Settlement Agreements with each CA Dept. of Fish and Wildlife (CDFW) and the National Marine Fisheries Service (NMFS) and conditions in</p>

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		the associated Water Right permits. Either with or without the Proposed Modifications, those requirements will still be in effect to maintain fish habitat as required by CDFW and NMFS. M1W can use all available and allowable flows to meet recycling demands with or without the Proposed Modifications.
27	<p>C. Biological Resources: Terrestrial (1st major bullet). Final SEIR fails to provide necessary updates to Mitigation Measure (“MM”) BT-1a. (Response to Comment VV-36.) Cal-Am Comment VV-36 requests that the SEIR be revised to clarify MM BT-1a to explain what type of coordination is required by MM BT-1a with the City of Seaside regarding the location of well facilities, as well as what sensitive biotic material is being removed.</p> <p>Final SEIR Response to Comment VV-36 fails to provide the necessary updates to MM BT-1a. Instead, the response generally refers to permit amendments that may be necessary and provides no information regarding the movement of well facilities or what sensitive biotic material might be removed. By improperly deferring these details until a future process with the City of Seaside, the SEIR withholds information from the public regarding the full scope of potential impacts. The Final SEIR response also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.</p>	<p>The response to this comment is a good faith reasoned response because the City requires these type of changes during coordination as part of their approval of a right of way, easements, property disposition, and the grading and ordinance ordinance permit disclosed on page 2-33 of the Draft SEIR. The City and all project proponents within the area of the injection wells are subject to the Habitat Management Plan requirements governing all development with the former Fort Ord areas of the City. The approved PWM/GWR EIR, the Draft Supplemental EIR and a multitude of readily available and referenced public documents provide all of the detail that this comment has requested. M1W together with their partner, MPWMD, have received these approvals for the Approved PWM/GWR Project and the changes requested did not trigger any changes that required recirculation of the Approved PWM/GWR EIR.</p>

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28	<p>C. Biological Resources: Terrestrial (2nd major bullet). Final SEIR fails to provide necessary updates to MM BT-1d. (Response to Comment VV-37.) Cal-Am Comment VV-37 requests that the SEIR be revised to clarify MM BT-1d to provide for restoration of the California legless lizard habitat.</p> <p>Final SEIR Response to Comment VV-37 fails to provide for the restoration of the California legless lizard habitat, and instead states that the California Department of Fish and Wildlife could require restoration if deemed necessary. Because the Final SEIR failed to update MM BT-1d to provide for restoration, the MM remains inadequate and improperly defers mitigation. (See Sundstrom v. Cty. Of Mendocino (1988) 202 Cal.App.3d 296, 306)</p>	<p>The SEIR analysis (including mitigation) is consistent with the related mitigation in the MPWSP EIR/EIS. Specifically, legless lizard habitat restoration is not included in the mitigation measures in the MPWSP EIR/EIS even though the project was identified to have a potential significant impact on the species. Impacts to this species on parcels identified as development in the Fort Ord Habitat Management Plan have been mitigated for through the implementation of the HMP. The HMP does not require restoration of legless lizard habitat on development parcels.</p>
29	<p>D. Energy (1st major bullet). Final SEIR fails to provide support for conclusions regarding the Expansion's fossil fuel consumption. (Response to Comment VV-42.) Cal-Am Comment VV-42 notes that the Draft SEIR fails to justify its conclusions that the Expansion would consume less than 10 percent of fossil fuel assumed for the PWM/GWR Project, or that energy consumption for the Expansion would be efficient.</p> <p>Final SEIR Response to Comment VV-42 fails to address meaningfully Cal-Am's comment. The Final SEIR includes no updated analysis to support that the Expansion would not result in an inefficient or wasteful use of energy and only updates the Final SEIR to indicate that the estimated construction fuel consumption has been added to page 4.7-6 of the Draft SEIR. The Final SEIR response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The response provides a good faith, reasoned response that construction of the Proposed Modifications would not result in wasteful or inefficient use of energy. The Draft SEIR on pages 4.7-5 through 4.7-7 dedicates more than two pages of text to the discussion of impacts and mitigation measures and finds that a significant impact may occur and requires mitigation with performance standards to reduce energy use. The estimation of energy (fuel use) for construction was based on information contained in Appendix B of Appendix F of the Draft SEIR. This analysis expands upon the approved PWM/GWR Project analysis in its Volume I section 4.7 that dedicates 20 pages to energy and mineral resources, including 10 pages with information and analysis of construction. Response to comment VV-42 in the Final SEIR provides additional analysis to respond to comment VV-42.</p>

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30	<p>D. Energy (2nd major bullet). Final SEIR fails to address deferral of analysis and mitigation of impacts associated with MM EN-1. (Response to Comment VV-43.) Cal-Am Comment VV-43 raised concerns that MM EN-1, Construction Equipment Efficiency Plan, impermissibly defers analysis and mitigation of construction impacts and requested that MM EN-1 be updated to include specific performance targets pertaining to energy use during construction.</p> <p>Final SEIR Response to Comment VV-43 only partially addresses Cal-Am's concern by revising MM EN-1 to implement measures to limit heavy equipment idling. However, MM-EN-1 fails to include specific performance targets to ensure efficient energy use. Accordingly, MM-EN-1 continues to improperly defer mitigation under CEQA (see Sundstrom, supra, 202 Cal.App.3d at 306), and the Final SEIR also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The public has been provided the technical analysis used to support the conclusions in the SEIR; the mitigation was amended as requested to contain performance targets with the addition of text provided in the Final SEIR, Chapter 5, page 5-15. M1W's inspectors and construction managers regularly and consistently monitor the contractors during construction and document compliance with energy efficiency requirements in the required plan, with the idling requirements, and with the mitigation. Additional performance targets have not been suggested by the commenter.</p>
31	<p>E. Geology, Soils and Seismicity. Final SEIR fails to provide an analysis of how and to what degree temporary construction-related erosion impacts will be mitigated. (Responses to Comment VV-47.) Cal-Am Comment VV-47 noted that the Draft SEIR did not provide any analysis or specific performance standards to indicate how potential temporary construction-related erosion impacts will be reduced to a less than significant level.</p> <p>Final SEIR Response to Comment VV-47 merely references its Response to Comment VV-48, noting that changes were made to provide page citations to descriptions of BMPs and other laws and regulations. The Final SEIR does not provide anything but a cursory analysis of how temporary erosion impacts from construction activities will be successfully mitigated through BMPs and compliance with laws. The Final SEIR must give an explanation of how and to what degree the impacts will be mitigated. The Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.</p>	<p>This comment is incorrect. Erosion control is a regulatory requirement of the local jurisdictions within which the components of the Proposed Modifications would be located. M1W and CalAm would be required to obtain and comply with City of Seaside grading permits for the injection and extraction wells and associated pipeline and appurtenant facilities, and with the State Water Resources Control Board General Permit for Construction Activities. M1W would also be required to obtain and comply with the County of Monterey grading permit for the segment of product water pipeline within the County jurisdiction and also the State General Construction Permit; thus, the permit requirements of these entities proscribe performance standards. It is unnecessary for an EIR to duplicate local and state requirements in mitigation measures when compliance with regulatory requirements would render an impact to be less than significant.</p>

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32	<p>F. Hazards, Hazardous Materials, and Wildfire (first major bullet). Final SEIR fails to incorporate mitigation requiring compliance with regulations regarding unexploded ordinance. (Response to Comment VV-51.) Cal-Am Comment VV-51 noted that while the Draft SEIR acknowledges that Expansion construction activities have the potential to encounter unexploded ordinance within the Fort Ord Military Reservation, it claimed these impacts would be addressed by compliance with federal and local regulations. Cal-Am Comment VV-51 therefore requested that the SEIR be revised to include specific mitigation to reduce potential impacts to a less than significant level.</p> <p>Final SEIR Response to Comment VV-51 summarily dismissed Cal-Am’s concerns, asserting that a mitigation measure requiring compliance with regulations regarding discovery of unexploded ordinance was “unnecessary.” Accordingly, the Final SEIR improperly defers mitigation related to discovery of unexploded ordinance by failing to include the requested mitigation measure (see <i>Sundstrom, supra</i>, 202 Cal.App.3d at p. 306) and the Final SEIR’s conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The SEIR contains all the information needed for the public to assess environmental impacts and to understand compliance actions that would prevent significant impacts as concluded in the SEIR.</p> <p>Compliance with requirements within local codes are described in detail in the Draft SEIR on page 4.9-17 repeated here for clarity:</p> <p>“These potential effects would be addressed through the compliance with FORA’s existing Right-of-Entry process. In addition to complying with FORA’s Right-of-Entry process, M1W and its contractors must comply with the City of Seaside Municipal Code Chapter 15.34 (i.e., the “Ordinance Remediation District Regulations of the City” in Ordinance 924), and the County of Monterey Code or Ordinance Chapter 16.10.050 (Permit Requirements for Digging and Excavation on the former Fort Ord). These ordinances establish special standards and procedures for digging and excavation on properties in the former Fort Ord which are suspected of containing ordnance and explosives (also called munitions and explosives of concern). Ordinance 924 requires that a permit be obtained from the City of Seaside for any excavation, digging, development, or ground disturbance of any type involving the displacement of ten cubic yards or more of soil. The permit requirements include providing each site worker a copy of the Ordinance and Explosives Safety Alert; complying with all requirements placed on the property by an agreement between the City, FORA, and DTSC; obtaining ordnance and explosives construction support; ceasing soil disturbance activities upon discovery of suspected ordnance and notifying the Seaside Police department, the Presidio law enforcement, the Army and DTSC; coordinating appropriate response actions with the Army and DTSC; and reporting of project findings.”</p> <p>These regulatory compliance requirements must be adhered to and including them within a mitigation measure would be unnecessary because it would be duplicative of requirements already in place.</p>
33	<p>F. Hazards, Hazardous Materials, and Wildfire (2nd major bullet). Final SEIR fails to analyze the wildfire hazard risk posed by the PWM/GWR Project as a whole. (Responses to</p>	<p>The public has been provided the technical work that supports the SEIR’s conclusions; the analysis in</p>

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	<p>Comments VV-52 to VV-53.) Cal-Am Comments VV-52 to VV-53 noted that, while the Draft SEIR provides an analysis of potential wildfire hazards presented by the Expansion, M1W failed to assess cumulative impacts of the PWM/GWR Project and the Expansion as a whole. As such, Cal-Am Comments VV-52 to VV-53 requested that the SEIR be revised to incorporate a wildfire hazard assessment for the PWM/GWR Project as a whole, rather than just the Expansion.</p> <p>Final SEIR Responses to Comments VV-52 to VV-53 declined to include any assessment of the Expansion's cumulative wildfire impacts with the PWM/GWR Project. The Final SEIR attempts to justify this refusal by asserting that the purpose of a supplemental EIR is not to reevaluate the impacts of the portions of a project that have already been approved. The Final SEIR noted that the Draft SEIR considered whether the Expansion could result in any new or increased risk of wildfire hazards when compared to the already approved PWM/GWR Project, but this is an impossibility because the PWM/GWR Project's wildfire impacts have never been analyzed. Therefore, the Final SEIR response is inadequate and fails to analyze cumulative impacts as CEQA requires. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)</p>	<p>the Draft SEIR includes a cumulative wildfire hazard risk analysis that analyzes the combined impacts of the approved PWM/GWR Project and the Proposed Modifications on pages 4.9-23 through 4.9-24 of the Draft SEIR.</p>

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34	<p>G. Hydrology and Water Quality: Groundwater Final SEIR ignores the reasonably foreseeable impacts to groundwater from seawater intrusion of pursuing the Expansion as an alternative to the MPWSP. (Responses to Comments VV-56 to VV-57.) Cal-Am Comments VV-56 to VV-57 noted that if the Expansion is pursued as a replacement to the MPWSP, then the MPWSP's benefits to the Salinas Valley Groundwater Basin ("SVGB") will not occur (i.e., further seawater intrusion can be expected).</p> <p>Final SEIR Responses to Comments VV-56 to VV-57 avoid meaningfully responding to Cal-Am's comments by arguing that because the MPWSP does not currently exist, it is not presently providing any seawater intrusion benefits. Thus, the Final SEIR concludes that it would not reduce water injected into the SVGB compared to existing conditions, and no further analysis is necessary. The Final SEIR's response ignores that it is reasonably foreseeable that the Expansion will be considered an alternative water supply to the MPWSP. As such, the SEIR must consider the Expansion's impacts relative to those of the MPWSP in order to enable informed decision making. (CEQA Guidelines, § 15121). The record shows that the MPWSP would benefit the SVGB aquifers by reducing existing and preventing additional seawater intrusion. (MPWSP Final EIR/EIS, pp. 4.4- 70, 4.4-92.) Therefore, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion is approved and the MPWSP is not built, including impacts to the SVGB's coastal aquifers from continuing seawater intrusion. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)</p>	<p>The SEIR evaluates the project pursuant to M1W Board direction as a back-up, not as an option in the place of, the MPWSP desalination project; the SEIR assumes the project would only operate if the MPWSP desalination project is not operating. Reiterating the response to VV-56, failure to construct and operate the MPWSP is not a potential impact of the Proposed Modifications. The Draft SEIR and the Final SEIR provide the technical work that supports the SEIR's conclusions that the Proposed Modifications would not adversely impact the Salinas Valley Groundwater Basin.</p> <p>The MPWSP would not inject any water into the SVGB; this is an incorrect statement in the comment. As requested by comments in Letter VV (including VV-56 and VV-57) a comparison of impacts of the MPWSP to the impacts of the Proposed Modifications is provided in the Final SEIR in Chapter 3 (see MR#5 on page 3-24 through 3-34 of the Final SEIR). A loss of benefit of another possible future project, i.e., due to failure to implement by a separate project proponent, in this case the MPWSP desalination project by Cal-Am, cannot be attributed as an adverse impact of another project, in this case, the Proposed Modifications.</p>
35	<p>H. Hydrology and Water Quality: Surface Water. Final SEIR fails to address the possibility that with the Expansion, the amount of water being diverted from the Carmel River may not be reduced. (Response to Comment VV- 58.)</p> <p>Cal-Am Comment VV-58 raised significant questions regarding the Expansion's ability to meet water demand. If demand is not met, diversions from the Carmel River will not decrease or may need to increase to meet the shortfall.</p> <p>Final SEIR Response to Comment VV-58 fails to meaningfully analyze how the Carmel River will be impacted if the Expansion fails to meet demand or otherwise provide any</p>	<p>The Proposed Modifications would increase water supplies for the CalAm Monterey District in the event that the MPWSP would not be timely implemented to meet the needs for replacement water, and would not result in increased diversions from the Carmel River.</p>

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	<p>substantive answer. Instead, the response points to Response to Comment VV-34 and Master Response #3, which themselves are based on M1W's disputed water supply analysis authored by Mr. Stoldt. The unsubstantiated and unvetted estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR's conclusions. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].) Reliance on Mr. Stoldt's inaccurate analysis therefore results in significant undisclosed impacts to steelhead trout and other species from ongoing Carmel River diversions, which the SEIR fails to analyze as discussed in Section III.B. Additionally, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion fails to meet demand. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)</p>	
36	<p>I. Land Use, Agricultural and Forest Resources. Final SEIR does not assess potential land use impacts resulting from the failure of the Expansion to satisfy water demand on the Monterey Peninsula. (Responses to Comments VV-59 to VV-60 and VV-63 to VV-64.) Cal-Am Comments VV-59 to VV-60 noted that the Expansion would result in significant land use impacts if the project fails to provide adequate water supply to meet the Monterey Peninsula's demand, and Cal-Am Comments VV-63 to VV- 64 provide several examples of local planning objectives with which the Expansion would conflict if Cal-Am's service area demand is not met.</p> <p>Final SEIR Responses to Comments VV-59 to VV-60 and VV-63 to VV-64 do not address Cal-Am's concerns. To begin, the responses rely on M1W's disputed water supply analysis authored by Mr. Stoldt to support the conclusion that the Expansion will enable Cal-Am to meet its Monterey district demand. As discussed further herein, Mr. Stoldt's estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a).) Notwithstanding these claims, the Final SEIR separately acknowledges the possibility that "more water than would be provided by the [Expansion] might be needed to meet demand for water on the Monterey Peninsula." (Final SEIR, pp. 4-543 to 4-544.) This is a meaningful admission, but the Final SEIR fails to assess the reasonably foreseeable land use impacts that would result, instead claiming that "[u]nmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the [Expansion]." (Final SEIR, pp. 4-543 to 4- 544.)</p> <p>Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant impact on land use if it would "[c]ause a significant</p>	<p>The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional growth. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives that require a new water supply. Unmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the Proposed Modifications. See also response to comment VV-56 and Chapter 3, MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)</p>

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	<p>environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.” (Draft SEIR, p. 4.12-8.) Failure to meet water demand would constitute a significant land use impact of the Expansion by conflicting with numerous applicable land use policies that require sufficient water supplies. These applicable land use policies are outlined in Cal-Am Comment VV-63. Accordingly, by failing to meet the water demand, the Expansion would not be consistent with local policies, plans, and regulations adopted for the purpose of avoiding an environmental effect. The Final SEIR is therefore incorrect in asserting that “[u]nmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the [Expansion].” The Final SEIR has failed to assess potentially significant land use impacts and therefore fails as an informational document under CEQA. Cal-Am Comments VV-61 and VV-62 and the Final SEIR’s responses relate to the Draft SEIR’s water supply and demand analyses. The Final SEIR’s failure to provide substantial evidence in support of its water supply and demand conclusions is addressed in Section II, Responses to Comments VV-7 to VV-7g <i>supra</i>.</p>	
37	<p>J. Marine Biological Resources (1st major bullet). Final SEIR fails to include additional source water quality data for the new sources of water to evaluate impacts to marine biological resources. (Response to Comment VV- 68. Cal-Am Comment VV-68 requested that the SEIR include additional source water quality data for the new source waters (i.e., Farmworker Housing and Salinas River Diversion Facility backwash).</p> <p>Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the Farmworker Housing discharge is similar to municipal sewage and that the Salinas River diversion backwash has lower pollutant concentrations than urban or agricultural run-off. The Final SEIR makes these conclusions without analysis or support. Therefore, the Final SEIR response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The Farmworker Housing and Salinas River Diversion Facility Backwash are not new source waters. Farmworker housing is a residential area and its municipal wastewater therefore will be the same as typical municipal wastewater flows whose water quality are accurately reflected by the data in the source water sampling campaigns in 2013 – 2014 and in 2018. The SRDF backwash is also an existing flow into the RTP that has occurred through the summer in 8 of the last 10 years. Again its constituents are reflected in the existing secondary effluent water quality results that were included in the Draft SEIR and used in the analysis of product water quality and reverse osmosis concentrate water quality for the Ocean Plan analysis for Surface Water Hydrology impacts. Water quality were provided in the Draft SEIR in Appendix E (summarized on pages 46 through 58 with detailed results presented in Appendix B) provided updated water quality information</p>

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		compared to the approved PWM/GWR EIR, Appendix D.
38	<p>J. Marine Biological Resources (2nd major bullet). Final SEIR fails to analyze the actual marine biological effects of changes in the ocean discharge due to the Expansion. (Response to Comment VV-69.)</p> <p>Cal-Am Comment VV-69 requested that the SEIR marine biological impacts analysis provide a quantification of pollutant discharges or their impact on marine species within the Zone of Initial Dilution.</p> <p>Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the analysis follows the California Ocean Plan guidelines and compares the volume within the Zone of Initial Dilution to the Monterey Bay volume to conclude that it would result in a negligible impact to marine species. The Final SEIR's failure to include an actual analysis and disclosure of associated impacts is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The analysis provided for the public in the SEIR provides an analysis that complies with CEQA. It is a quantitative analysis of the impacts on marine water quality and marine biological impacts according to the significance criteria established by M1W in the SEIR and follows the same methodology as the analyses in the MPWSP EIS/EIR and in the Approved PWM/GWR EIR both of which were prepared by the same consultant team, Trussell Technologies, who prepared the analysis herein. Also, both the Regional Water Quality Control Board and the Monterey Bay National Marine Sanctuary have approved the analysis assumptions and methodology and it is the basis for their approvals of M1W's existing NPDES Permit and MBNMS Authorization.</p>
39	<p>K. Noise and Vibration (1st major bullet). Final SEIR does not adequately describe the nearest noise sensitive receptors or ambient noise levels for the extraction wells. (Response to Comment VV-70.)</p> <ul style="list-style-type: none"> - Cal-Am Comment VV-70 noted that the Draft SEIR's description of the environmental setting for the Expansion did not include a description of the nearest noise sensitive receptors or ambient noise measurements for the new extraction wells, and requested that the SEIR be revised to incorporate such a description. - Final SEIR Response to Comment VV-70 summarizes existing noise and vibration conditions that are described in Appendix K and fails to provide any new analysis to address the points raised. The Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised. 	<p>The Draft and Final SEIR provided the requested information about noise sensitive receptors on page 5 through 7 of Appendix K. Minor revisions to Appendix K were included in the Final SEIR, including revisions to document the noise measurements taken as requested by this comment prior to completing the Final SEIR. M1W requested CalAm approval of the additional noise measurements prior to completing them because they were applicable to the CalAm components of the Proposed Modifications.</p>
40	<p>K. Noise and Vibration (2nd major bullet). Final SEIR continues to utilize inconsistent thresholds to assess daytime construction noise impacts and fails to disclose a potentially significant noise impact. (Responses to Comments VV-73 to VV-74.)</p>	<p>A lead agency has discretion to use thresholds of significance based on substantial evidence and this case, application of commonly used thresholds (i.e., thresholds used by local agencies within</p>

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	<ul style="list-style-type: none"> - Cal-Am Comments VV-73 to VV-74 raised concerns that the Draft SEIR appeared to use inconsistent standards for assessment of construction noise impacts. Cal-Am Comments VV-73 to VV-74 noted that based on the noise threshold applied elsewhere in the SEIR, construction noise related to the conveyance pipeline would result in noise levels above the 70 dBA Leq threshold and therefore appeared to constitute a significant undisclosed impact. - Final SEIR Responses to Comments VV-73 to VV-74 attempt to justify use of a two-week threshold for assessing noise impacts caused by construction of the conveyance pipelines by referring to the use of such a threshold in other project EIRs. The Final SEIR also makes the unsupported assertion that daytime construction noise exceeding 70 dBA Leq would not “cause a nuisance or result in significant environmental noise impact,” unless the construction noise lasted more than two weeks. However, the Final SEIR fails to provide any evidence or explanation for the invented threshold it is applying. Accordingly, it appears that the Expansion would exceed adopted construction noise thresholds, and the Final SEIR fails to disclose a significant noise impact associated with construction of the conveyance pipeline, such that recirculation is required. (CEQA Guidelines, § 15088.5, subd. (a).) 	<p>which the project is located) is appropriate and supported by substantial evidence.</p>
41	<p>L. Population and Housing (1st major bullet). Final SEIR fails to account for any housing and population impacts related to the Expansion’s potential inability to provide adequate water supply. (Response to Comment VV-79.)</p> <ul style="list-style-type: none"> - Cal-Am Comment VV-79 noted that the Draft SEIR failed to include any analysis of population and housing impacts related to the potential inability of the Expansion to meet the Monterey Peninsula’s water demand, without implementation of the MPWSP. Cal-Am explained that, based on the supply and demand numbers adopted by the CPUC and analyses put forth by Cal-Am’s experts, the Expansion cannot provide a reliable water supply sufficient to meet demand on the Peninsula. Moreover, even under the unsupported demand estimates put forth in the Initial Stoldt Memo, the Expansion would only satisfy a reduced five-year demand average for three years before falling out of compliance. Thereafter, the Monterey Peninsula would be without a reliable water supply to accommodate reasonable growth. Therefore, Cal-Am requested that the SEIR be revised to account for that uncertainty and to disclose any resulting impacts on population and housing. - Final SEIR Response to Comment VV-79 does not address these concerns, and instead notes that the Expansion is intended to serve as a back-up supply if the MPWSP is delayed. The Final SEIR then attempts to avoid responsibility for assessing any potential failure of the Expansion to provide water sufficient to meet growing demand on the Peninsula by stating 	<p>The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional growth. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives for population and housing such that an environmental impact would result even if that objective would require an additional new water supply. Unmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the Proposed Modifications. See also response to comment VV-79 and Chapter 3, MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)</p>

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	<p>that “agencies approving any development projects that might increase water demand would need to take in to account the water supply that would be available through the [Expansion] ”</p> <p>However, that response improperly defers the analysis of a reasonably foreseeable environmental consequence that would result from the Expansion’s approval. Specifically, it is reasonably foreseeable that as a result of approval of the Expansion, the MPWSP would not be approved and thus the Peninsula’s future water demand would not be met. The SEIR therefore must evaluate housing impacts related to the inability of the Expansion to meet the Monterey Peninsula’s water demand without implementation of the MPWSP. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at p. 396.)</p>	
42	<p>L. Population and Housing (2nd major bullet). Final SEIR fails to disclose a potential significant impact to population and housing regarding a failure to supply sufficient water to accommodate regional affordable housing goals. (Responses to Comments VV-80 to VV-82.)</p> <p>- Cal-Am Comments VV-80 to VV-82 noted that failure to provide a water supply sufficient to accommodate increased demand and population growth on the Monterey Peninsula could depress the buildout of necessary affordable housing on the Peninsula, as dictated by the Regional Needs Housing Assessment (“RHNA”) for the Monterey Bay Area. Based on the predictions set forth in the Initial Stoldt Memo, the Expansion could only meet Peninsula demand, even with depressed demand numbers, for a maximum of three years, after which the Peninsula would be without excess water supply to accommodate regional housing growth. This failure to meet RHNA goals for affordable housing buildout would be a significant impact that the Draft SEIR failed to analyze.</p> <p>- Final SEIR Responses to Comments VV-80 to VV-82 do not attempt to address this potential impact on population and housing. The Final SEIR instead simply refers back to responses to comments VV-56, VV-63, and VV-79, Master Response #3, and Appendices N and O to the Final SEIR. None of these responses provide an analysis of a possible situation where the Expansion cannot meet Peninsula water demand and therefore cannot accommodate regional affordable housing goals. Rather, Master Response #3 attempts to argue that a failure by the Expansion to produce sufficient water to accommodate growth “would not be a consequence or adverse physical environmental effect” of the Expansion and therefore does need not be analyzed in the SEIR. Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant population and housing impact if the Expansion would “a. induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);</p>	<p>The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional affordable housing. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives for population and housing such that an environmental impact would result. Unmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the Proposed Modifications. See also response to comment VV-80 and 81 and Chapter 3, MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)</p>

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	<p>or b. displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.” (Draft SEIR, p. 4.15-8.) In evaluating these significance criteria, the Draft SEIR examines compliance with population and housing needs projections including the RHNA. Failure of the Expansion to produce sufficient water to accommodate the Peninsula’s population would be a direct result of the Expansion and could result in the displacement of Peninsula residents – including low income residents that are unable to secure adequate housing. This potential for displacement is a reasonably foreseeable significant impact that the SEIR fails to analyze. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.) The SEIR’s failure to analyze this reasonably foreseeable significant impact and the Final SEIR’s conclusory response do not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p>	
43	<p>M. Water Supply and Waste Water Systems (1st major bullet). The Final SEIR fails to analyze changed circumstances and new information affecting water supplies. (Responses to Comments VV-83 to VV-86.)</p> <p>Cal-Am Comments VV-83 to VV 84 expressed concerns that the Draft SEIR was not adequately evaluating changed circumstances, such as climate conditions, since approval of the PWM/GWR Project Final EIR. While the Draft SEIR asserts that “[t]he existing environmental setting information contained in the PWM/GWR Project Final EIR has generally remained unchanged since the certification of the PWM/GWR Project Final EIR” (Draft SEIR p. 4.18-3), Cal- Am commented that the Draft SEIR does not evaluate if changes to climate conditions have impacted the availability of water sources for the Expansion since approval of the PWM/GWR Project.</p> <p>- Final SEIR Responses to Comments VV-83 to VV-84 state that the Draft SEIR considered recently published and collected data, and that changes to water supplies from climate conditions and agricultural and municipal water conservation were incorporated into the Draft SEIR analysis at Section 4.18. Further, these responses point to and summarize the Greater Monterey County and the Monterey Peninsula Integrated Regional Water Management Plans, which were not previously evaluated in Draft SEIR Section 4.18, in an effort to demonstrate that source waters have not been reduced by climate change. However, neither Draft SEIR Section 4.18 or the Final SEIR’s summary of the integrated regional water management plans provide meaningful analysis demonstrating that water sources for the Expansion have remained unchanged by climate conditions or other changed circumstances. As a result, the Final SEIR’s response does not satisfy the</p>	<p>The SEIR provides substantial technical information about water supplies to enable the public and decisionmakers to understand and comment on the environmental impacts of the Proposed Modifications on Water Supply and Wastewater Systems including information on climate change effects and assumptions. A summary of these topics is provided in MR#3 (Chapter 3, section 3.3 of the Final SEIR). In addition, response to comment VV-83 demonstrates that M1W has continually aimed to incorporate the latest published, scientific research on climate change into its water and wastewater planning. M1W staff, including Operations Managers, Engineering Manager and Principal Engineer were consulted in developing assumptions for the SEIR analyses of these issues. In addition, M1W leadership and ongoing active participation in the Monterey County Drought Contingency Plan, the Salinas and Carmel River Basins Study, and both Integrated Water Resources Management Planning efforts demonstrates that the latest science and forecasting data is consistently used for decision-</p>

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	<p>requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p> <ul style="list-style-type: none"> - Cal-Am Comments VV-85 to VV-86 provide examples of reduced availability of water supplies since the approval of the PWM/GWR Project Final EIR that have not been evaluated in the Draft SEIR. One example identified was the reduced availability of Tembladero Slough source water that occurred since the approval of the PWM/GWR Project. - Final SEIR Responses to Comments VV-85 to VV-86 concede that the Draft SEIR's reliance on the Tembladero Slough as a reliable water source was in fact unreliable and the Final SEIR no longer accounts for Tembladero Slough as a source of water. The removal of Tembladero Slough as a water source is just one of several examples of water supplies that have proven to be unreliable or unavailable despite M1W's prior assurances that such sources were secured. Given the change and significant reallocation of source waters proposed in the Final SEIR and Appendix M, it is apparent that the SEIR should be revised and recirculated to fully account for and evaluate the reliability of the revised set of source water proposed in Appendix M. (CEQA Guidelines, § 15088.5, subd. (a) [CEQA Guidelines require recirculation when a draft EIR is "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."].) 	<p>making, technical reporting, and planning activities of M1W. M1W's analyses of source waters, including municipal wastewater and other new source waters, are based on actual data collected, recorded, and reported to regulatory agencies by M1W. Where actual flows were not available, assumptions were developed by M1W staff based on their expertise and knowledge including certifications and licenses issued by the State of California. Appendices I and M, and MR#3 document how water sources have changed and may change in the future.</p>
44	<p>M. Water Supply and Waste Water Systems (2nd major bullet). The Final SEIR inappropriately relies on source water from the ARWRA. (Response to Comments VV-87 to VV-91 and VV 104 to VV-105.)</p> <ul style="list-style-type: none"> - Cal-Am Comments VV-87 to VV-91 and VV 104 to VV-105 noted that the Draft SEIR overstates the security of source water subject to the ARWRA, while ignoring the significance of the conditions precedent that must be met in the ARWRA for all sources of water to become fully secured. - Final SEIR Responses to Comments VV-87 to VV-91 and VV 104 to VV-105 continue to overstate the availability of source waters under the ARWRA for the Expansion and present additional interpretation flaws that show the source waters for the Expansion are not secured. - First, Appendix M of the Final SEIR discusses new source waters available for use as set forth in the ARWRA, claiming that the ARWRA and Amendment No. 1 to the ARWRA allow M1W to use multiple categories of source water for the Expansion. (Final SEIR Appendix M, p. 5.) Appendix M continues to improperly assume that ARWRA new source waters apply to the Expansion, despite the fact that the ARWRA does not contemplate such a use. (See ARWRA Recitals pp. 6-7; Section 	<p>M1W has provided technical information to support its conclusions about its water rights under a variety of scenarios. The following provides clarifying information related to this comment:</p> <ul style="list-style-type: none"> • The analysis in Appendix M shows that M1W possesses rights to wastewater that it treats such that it can produce the yield described in the Proposed Modifications without the use of any New Source Waters (as defined in the ARWRA). • The analysis in Appendix M does not state that the conditions precedent would be met by June 20, 2020. M1W staff received input and disclosed that MCWRA does not intend to fund the new source waters until well beyond that date and has requested an extension to Amendment No. 1 that would continue to

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<p>4.01 1(d).) The ARWRA was approved based on the 2015 Final EIR for the PWM/GWR Project, and the ARWRA has not been revised to allow water to be used for the Expansion. (See ARWRA Recitals pp. 6-7; Amendment No. 1.)</p> <p>- Second, instead of providing a definitive answer as to the total quantity of available source water for the Expansion, the Final SEIR avoids the question by providing four alternative scenarios in Appendix M. The estimates include normal/wet scenarios versus dry/drought scenarios when the conditions precedent in the ARWRA are met, versus when they are not. (Final SEIR, pp. 3-14 to 3-15.) However, two scenarios assume the ARWRA conditions precedent are met by June 30, 2020, which is virtually impossible. Therefore, these scenarios are neither realistic nor reasonable, and cause the Final SEIR to fail as an informational document. The other two scenarios that assume conditions are met are likewise unreasonable and speculative. These scenarios purport to demonstrate sufficient supplies for the Expansion by relying on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. M1W has not explained how or why this increase has occurred. This critical information was not subject to public review and comment. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (Id.) By substantially altering the water sources and supplies purportedly available to the Expansion, M1W has precluded meaningful public review and comment on this critical issue for the Expansion, and recirculation is now required. (<i>Save Our Peninsula Comm., supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)</p> <p>- Third, recognizing M1W has water rights issues with respect to the applicability of the ARWRA’s new source water facilities for the Expansion, Appendix M assumes no new source waters would be used for the Expansion, regardless of whether the conditions precedent in Section 16.15 of the ARWRA are met. (Final SEIR Appendix M, p. 9.) To that end, Appendix M uses an “updated set of assumptions . . . represent[ing] newer information.” (Id., pp. 9-11.) Appendix M does not state where these assumptions come from, who made the assumptions or whether they are accurate. For instance, the Final SEIR relies upon the availability of certain municipal wastewater flows even though the Final SEIR acknowledges that such flows have not previously been metered and that the</p>	<p>allow M1W to use the New Source Waters for influent to the AWPf.</p> <ul style="list-style-type: none"> • The lack of completion of conditions precedent in the ARWRA does not preclude M1W from using its rights to secondary treated effluent that it produces. • Appendix M was prepared by licensed engineers collaboratively with other M1W and MCWRA staff. Its assumptions and methodology have been provided to the public for their review and consideration. Multiple meetings between MCWRA and M1W have occurred since June of 2019 to discuss the data, methodology, and assumptions. The public has been provided information to support the SEIR conclusions. • The analysis provided in Appendix M does not change the conclusions related to the environmental impacts of the Proposed Modifications. The availability of less water for recycling, if that were to occur, would not create new significant impacts, nor worsen the severity of the significant impacts already identified. This analysis does not provide any additional mitigation or alternatives that the Board would decline to adopt. The information merely clarifies or amplifies the information and supporting document in the Draft SEIR that was the basis for the SEIR conclusions in response to the comments on the Draft SEIR.

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	<p>estimates are based in part upon assumptions. (Final SEIR, p. 24-25 [Master Response # 3, pp. 3-11 to 3-12].) As a result, the analysis provided in the Final SEIR is wholly speculative and not based on substantial evidence. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].)</p> <p>- In addition to these numerous issues, the Final SEIR’s response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p>	
45	<p>M. Water Supply and Waste Water Systems (3rd major bullet). The Final SEIR continues to overlook the availability of water supplies during drought years. (Responses to Comments VV-100 to VV-101.)</p> <p>- Cal-Am Comments VV-100 to VV-101 expressed concern that the Draft SEIR and specifically Draft SEIR Appendix I (Schaaf & Wheeler 2019 memorandum evaluating source water availability) only evaluated a single year of drought.</p> <p>- Responses to Comments VV-100 to VV-101 do not respond to this concern. Instead, these responses assert that prolonged drought conditions were evaluated. This is inaccurate. The Draft SEIR Appendix I conducted its evaluation of municipal wastewater based on the average of years 2009–2013 for treated municipal wastewater, which only included one drought year. (Draft SEIR Appendix I, p. 5.) This analysis is deficient because the CEQA Guidelines require the Draft SEIR to evaluate if there is sufficient water available for reasonably foreseeable future development in normal, dry and multiple dry years. (CEQA Guidelines, Appx. G, § XIX(b).) The Final SEIR response ignores this requirement and Cal-Am’s comments. Further, Appendix M assumes that there will be adequate water supply during drought years because the Expansion will build a “drought reserve” during normal/wet years. (Appendix M, p. 9.) However, Appendix M fails to explain how this process of “banking” excess supply will occur or how much would be stored in a given normal/wet year. Moreover, it is unclear whether the banked reserve would be adequate for the Expansion under a multi-year drought or a multi-year severe drought, as is common in California. Thus, the Final SEIR fails to adequately evaluate and disclose potential water supply impacts, and the response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The CEQA Guidelines section in this comment is applicable to a development project that creates new demand for water supplies. In this case, the Proposed Modifications would create a water supply that can be injected in the groundwater basin and saved from one year to the next. Thus, water produced during wet and normal years can physically be available for use during dry or drought years. Multiple drought years could thus be accommodated. The analysis in the SEIR provides the information needed by the public to understand the environmental impacts of the Proposed Modifications on water supply and wastewater systems; no additional information is necessary to clarify the information already presented.</p>
46	<p>M. Water Supply and Waste Water Systems (4th major bullet). The Final SEIR does not provide an accessible summary of the quantity of water expected to be generated from each analyzed source. (Responses to Comments VV-102 to VV-105.)</p>	<p>M1W’s right to the treated wastewater from the RTP is provided by California Water Code 1210. Several agreements have granted rights to this</p>

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	<p>- Cal-Am Comments VV-102 to VV-105, explained that the Draft SEIR failed to identify the quantity of water expected to be obtained from each water source or where such information can be found. Cal-Am explained that this information is necessary for M1W to demonstrate how available source water is sufficient for the Expansion and the already approved PWM/GWR Project to meet their maximum outputs.</p> <p>- Responses to Comments VV-102 to VV-105 do not respond to this concern. Rather than provide the public with clarity as to the constituent quantities of source water availability, the Final SEIR frustrates public review of the Expansion by once again altering the water supply estimates provided. For example, estimated Reclamation Ditch water available to the Expansion decreased from 1,014 afy in the Draft SEIR to 808 afy in the Final SEIR as a result of a conflicting estimate provided in Appendix M. Additionally, the quantity of secondary effluent source water relied upon has dramatically increased since the Draft SEIR was published. More concerning, the Final SEIR now relies on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. (Compare Final SEIR, p. 777 [Appendix M, Table 2] with Draft SEIR Appendix I, Table 8.) M1W has not explained how or why this increase has occurred.</p> <p>This critical information was not subject to public review and comment and should be recirculated and evaluated to determine if potential significant environmental impacts may occur. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (Id.) By once again altering the sources and supplies purportedly available to the Expansion, M1W has precluded meaningful public review and comment. (<i>Save Our Peninsula Comm., supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)</p>	<p>secondary effluent to others. These issues, the basis, methodology and assumptions for the analysis are described in the SEIR. MR #3 (Chapter 3, section 3.3 of the Final SEIR) and Appendix M of the Final SEIR describe how the secondary effluent used for the Proposed Modifications could be increased given the existence of substantial M1W rights to this water. It is a policy decision of the Board to determine how they would like to use these rights. M1W staff and consultants have prepared the SEIR to ensure that the environmental impacts have been adequately described in the SEIR to provide the public meaningful information on which to base their comments and decisions.</p>
	IV. OTHER CONSIDERATIONS	
47	<p>A. Growth Inducement (1st major bullet). Final SEIR continues to rely on MPWMD staff’s flawed supply and demand estimates in analyzing the Expansion’s growth inducing impacts and thereby fails to assess any potential for the Expansion to cause adverse growth impacts. (Responses to Comments VV-106 to VV-107.)</p> <p>Cal-Am Comments VV-106 to VV-107 raised concerns regarding the Draft SEIR’s reliance on the Initial Stoldt Memo in assessing the Expansion’s potential for inducing significant</p>	<p>The Final SEIR presents a discussion of the potential growth that could be induced by the Proposed Modifications based both upon the evidence that the CPUC considered when it approved the MPWSP and the additional evidence that the Water Management District gathered and</p>

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	<p>population growth on the Monterey Peninsula. Cal-Am noted that both MPWMD staff's demand estimates and the Draft SEIR's reliance on those estimates were wholly unsupported, and therefore the Initial Stoldt Memo could not constitute substantial evidence for purposes of analyzing growth inducement impacts. As such, Comment VV-107 requested that the SEIR's growth inducement analysis be revised to remove any reliance on MPWMD staff's estimates.</p> <p>- Final SEIR Responses to Comments VV-106 to VV-107 fail to address the flaws in population growth estimates from MPWMD staff, and simply state that as a CEQA lead agency, M1W "can choose to rely on facts, data, and analysis provided by experts. . . ." The Final SEIR makes no attempt to provide additional substantial evidence in support of its population growth assessment, but instead refers back to Master Response #3, the Updated Stoldt Memo at Appendix O that was not available to the public during the comment period, and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous flaws in MPWMD staff's estimates that are raised by various commenters, but instead dismisses these flaws as "differences of opinion." The Final SEIR's analysis of growth inducing impacts continues to improperly rely on Mr. Stoldt's estimates, which are not supported by substantial evidence, and the response also does not satisfy the requirements of CEQA Guidelines Section 15088. Moreover, as explained by Cal-Am and other commenters, the unrealistic and inaccurate analysis by MPWMD underestimates current and future demand for water on the Monterey Peninsula. Should population growth and resulting future demand exceed the projections put forward by MPWMD staff and adopted by the SEIR, the Expansion would not produce sufficient water to satisfy demand, and would harm Peninsula cities by actually inhibiting planned growth. (See Section III.L, supra.) Reliance on Mr. Stoldt's inaccurate estimates therefore results in an undisclosed impact related to population growth that the SEIR fails to analyze, requiring recirculation. (CEQA Guidelines, § 15088.5, subd. (a).)</p>	<p>presented in its Supply and Demand Memorandum. To be conservative, the Final SEIR discloses that, under the Water Management District's analysis, the Proposed Modifications could induce the same amount of growth as the MPSWP. This ensures that the full impact, based upon the evidence in the record, has been disclosed in the Final SEIR. The recent revisions to the Water Management District's Supply and Demand Report do not change any of the conclusions in the Draft SEIR, and therefore do not trigger a requirement to recirculate the Draft SEIR for additional public review and comment. The Water Management District's revisions, along with the responses to the Hazen and Sawyer document, are responsive to many of the comments that CalAm and its consultants provided on the initial version of the Supply and Demand Report. The Water Management District's Supply and Demand Report provides the factual basis for its conclusions, and constitutes a report prepared by an expert in the field. Therefore, it meets CEQA's definition of substantial evidence. The Proposed Modifications are proposed as a backup to the MPWSP not as a project to displace the MPWSP. If the Proposed Modifications are needed due to a delay in implementing the MPWSP, the Proposed Modifications would augment the regional water supply.</p>
48	<p>A. Growth Inducement (2nd major bullet). Final SEIR fails to analyze the Expansion as a cumulative project with the MPWSP with respect to growth inducing impacts. (Responses to Comments VV-108 to VV-109.)</p> <p>- Cal-Am Comments VV-108 to VV-109 requested that the SEIR be revised to assess the cumulative growth inducing effects resulting from the concurrent operation of the Expansion and the MPWSP. Because the Expansion could be implemented simultaneously</p>	<p>The Proposed Modifications potentially could be implemented in short-succession with the MPSWP. This is consistent with the cumulative impacts and growth inducement analyses in the SEIR. The growth inducement analysis assumes that the Proposed Modifications could accommodate the</p>

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	<p>with, or in short succession of, the MPWSP, an increase in water supply from the Expansion combined with water supplied by the MPWSP would result in cumulative population growth effects beyond those analyzed in the Draft SEIR. As such, CEQA requires the SEIR to analyze the cumulative growth inducing impacts of the Expansion. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)</p> <p>- Final SEIR Responses to Comments VV-108 to VV-109 do not respond directly to Cal-Am’s concerns, but refer back to Master Response #4 regarding the adequacy of the SEIR’s cumulative impacts analysis. The Final SEIR also maintains that the Expansion is not an alternative water supply to the MPWSP— therefore, the Expansion must be considered a cumulative project implemented simultaneously with the MPWSP and must be analyzed as such. While Final SEIR Master Response #4 asserts that the Expansion “is not expected” to operate concurrently with the MPWSP, it would be unreasonable to expend significant funds on development of the Expansion, only to mothball that water supply when the MPWSP comes online. CEQA requires the analysis of reasonably foreseeable environmental consequences (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396), and it is reasonably foreseeable that the Expansion would not be mothballed given that it would provide a water supply to a region where water resources are scarce. Therefore, the SEIR must evaluate the impacts of that increase in supply in addition to any potential growth impacts caused by the MPWSP. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).) The Final SEIR attempts to avoid a complete analysis of the Expansion’s growth inducing impacts by unreasonably arguing that the Expansion is not a cumulative project with the MPWSP. (See Section I, supra.)</p>	<p>long-term growth projections for the region. If the MPSWP is implemented, the MPSWP would replace the expansion water provided by the Proposed Modifications and accommodate the total amount of projected growth. Because the MPSWP and the Proposed Modifications would not operate simultaneously, there would be no cumulative impacts associated with changes at the M1W outfall or injection into the Seaside Groundwater Basin. Per the direction of the M1W Board of Directors, the Proposed Modifications are evaluated as a backup to the MPSWP. The SEIR assumes, as it must, that the Proposed Modifications could be implemented over a long period. This could occur, for example, if the MPSWP does not receive the necessary regulatory approvals for its construction and implementation. It is also possible that the Proposed Modifications could be operated for a shorter period. Before entering into a Water Supply Agreement or other financial arrangement, the M1W Board of Directors would consider the information before it as to the likely time period that the Proposed Modifications would be needed, the expected capital and operational expenditures, and the financial feasibility of moving forward with the project. The SEIR is not intended to be the sole source of information that the Board considers in determining the terms of financial arrangements. There are no known uses of the expanded water supplies that would be produced by the Proposed Modifications beyond use of those supplies as a backup to the MPWSP. Without any known uses, it is not possible to analyze future uses of the Proposed Modifications other than as a backup to</p>

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		the MPSWP and CEQA does not require such speculation.
49	B. Alternatives. See Section I, supra, for a discussion of the Final SEIR's failure to evaluate the MPWSP as a water supply project alternative to the Expansion. (Responses to Comments VV-110 to VV-115.)	Under CEQA, an alternative must be capable of substantially reducing one or more of the significant environmental effects of the proposed project. The MPSWP would not reduce the significant environmental effects of the Proposed Modifications, and therefore does not meet CEQA's definition of an alternative.
	V. RECIRCULATION	
50	The Draft SEIR was missing critical data and analysis of the Expansion's potential impacts as a standalone project, as well as impacts that may occur if the Expansion and the MPWSP are developed cumulatively. Appendix M has dramatically increased the quantity of secondary effluent source water relied upon by the Expansion from what was contemplated in the Draft SEIR, and has not explained how or why this change occurred. This critical information was not subject to public review and comment. By including last minute information about new water rights and sources purportedly available to the Expansion, M1W has rendered the Draft SEIR substantively inadequate and deprived the public of meaningful review and comment. (CEQA Guidelines § 15088.5; Save Our Peninsula Comm., supra, 87 Cal.App.4th at 131.) The SEIR must be revised and recirculated for additional comment in order to address this significant deficiency, as well as the numerous deficiencies identified above. (CEQA Guidelines § 15088.5.)	Additional information that has been added to the SEIR is responsive to the comments and questions that have been received. The addition of information does not trigger recirculation unless the new information indicates that a new or substantially more severe significant impact would result from the project or a feasible alternative or mitigation measure considerably different from those that were evaluated would lessen the environmental impacts of the project. The additional source water information does not change any of the Draft SEIR's conclusions as to the significant impacts of the Proposed Modifications, nor does the information indicate that a new or different project alternative or mitigation measure would lessen the impacts of the Proposed Modifications. Because the additional information does not materially affect the SEIR's impact analysis, mitigation measures or alternatives, the information does not indicate that the document was fundamentally and basically inadequate. Rather, the additional information augments an already adequate SEIR by providing a further analysis of source water supplies based upon updated data.

Supplemental Information from Monterey One Water Staff in Response to Latham and Watkins Letter Dated 4/24/2020 (continued)

	Latham and Watkins/ Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response
	THE EXPANSION IS NOT ENOUGH TO LIFT THE CDO	
51	<p>The Final SEIR errs in relying on MPWMD staff’s supply and demand conclusions that “[1] the Proposed Modifications can meet the long-term needs of the Monterey Peninsula; [and] [2] the Proposed Modifications would be sufficient to lift the State Water Board Cease and Desist Order.” (Final SEIR, p. 3-7.) These conclusions are inconsistent with the findings, decisions, and standards of the regulatory agencies with subject matter jurisdiction over the issues—the CPUC and SWRCB. Cal-Am remains concerned that the Expansion will not supply enough water to meet the needs of the Monterey Peninsula to allow lifting of the CDO. The CPUC, as part of its extensive review and approval of the MPWSP, specifically addressed the water demand projections for the Monterey Peninsula. The CPUC had “a considerable record” of the numerous parties’ water demand projections for the Monterey Peninsula. (See CPUC Dec. 18-09-017, § 4.2.1, p. 24; See also id. at pp. 24-33.) The CPUC also reviewed and assessed the water supply available to Cal-Am to serve the Monterey Peninsula, including information relating to the Expansion, and concluded that even if the Expansion were considered a source of supply for Cal-Am, Cal-Am would still have a water supply deficit. (Id. at § 4.3, pp. 40-42.) Thus, the Expansion alone is insufficient to meet the Peninsula’s long-term water demands. Finally, Cal-Am has substantial concerns that the Expansion’s water supply will be insufficient to allow for lifting of the CDO. In order for the CDO to be lifted: (1) Cal-Am must certify to the SWRCB, “with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River;” and (2) the SWRCB’s Deputy Director of Water Rights must concur with Cal-Am’s certification. (SWRCB Order 2016-016, Condition 15 at p. 27.) Cal-Am has expressed its significant concerns and disagreement with the supply and demand analysis relied upon by M1W, and those concerns have not been addressed. Moreover, insufficient evidence has been provided concerning the ability of the Expansion to act as a permanent supply of water. Cal-Am is also concerned that any reliance on the Expansion to replace Carmel River diversions may violate the California Safe Drinking Water Act. Health and Safety Code section 116555 requires that “[a]ny person who owns a public water system shall ensure that the system . . . [p]rovides a reliable and adequate supply” of water. (H&S Code, § 116555(a)(3) [emphasis added].) And if any of the Expansion’s source waters are not available on a permanent and adequate basis, there is an even greater risk that the Expansion will not be able to provide an adequate and reliable water supply sufficient to remove the CDO and satisfy Health and Safety Code section 116555.</p>	<p>The SEIR is intended to provide information to the public and decision-makers regarding the effects that the Proposed Modifications would have on the physical environment. The decision by the State Water Board as to whether to lift the CDO is a quasi-adjudicatory decision that would be made based upon the full record presented to the State Water Board, which likely would include updated information regarding regional water supply and demand as well as updated information as to the status of the MPSWP. Substantial evidence in the record indicates that Proposed Modifications physically would be capable of supplying enough water to lift the CDO; however, it is not the role of the SEIR to determine whether the State Water Board ultimately would do so.</p>



City of Salinas

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April 27, 2020

Via Email - purewatermontereyinfo@my1water.org

Chair Ron Stefani

Monterey One Water Board of Directors

5 Harris Court, Building D

Monterey, CA 93940

Re: Use of Agriculture Produce Wash Water for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, Final Supplemental Environmental Impact Report (Final SEIR)

Dear Chair Stefani and Members of the Board:

The City of Salinas continues to have significant concerns regarding the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (Expansion Project), and believes that the Final Supplemental Environmental Impact Report (SEIR) is inadequate. In particular, the Final SEIR fails to meaningfully address the City's concerns regarding the use of Agricultural Wash Water as detailed in the City's January 29, 2020 comment letter on the Draft SEIR (Salinas Comment Letter). Instead of addressing the City's legitimate concerns, the Final SEIR includes an entirely new source water analysis that has never been publicly vetted, and continues to claim that water sources that belong to the City and Salinas Valley farmers, businesses and residents will be available for the Expansion Project. These issues alone render the Final SEIR inadequate, and it cannot be certified.

The Salinas Comment Letter on the Draft SEIR specifically expressed concerns that (1) "M1W does not have sufficient agreements in place with the City to permit M1W to use the City's agriculture produce wash water for the Expansion Project," and (2) the Amended and Restated Water Recycling Agreement ("ARWRA") "does not contemplate the use of agricultural produce wash water for the Expansion Project." Neither of these concerns have been addressed adequately in the Final SEIR.

Regarding the use of Agricultural Wash Water, the City has explained that the 2015 Conveyance and Treatment Agreement allows Agricultural Wash Water to be used **only for the previously approved** Pure Water Monterey Replenishment Project, and **not for the proposed** Expansion Project. (See Agreement, § 1.a-b, Recital B.) The Final SEIR does not respond to this simple contractual issue. While M1W and the



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City have worked together cooperatively in the past to manage wastewater systems in the City (Comment F, p. 4-89), the fact remains that there is no agreement between M1W and the City for use of the Agricultural Wash Water.

In the absence of an agreement, the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City's agriculture industry, as determined by the City in its sole and absolute discretion. M1W notes that it is "unaware of another treatment plant besides its own that could enable use of the Agricultural Wash Water for another purpose" (Comment F, p. 4-89). However, M1W is not entitled to the City's Agricultural Wash Water simply because the City has not yet formalized its future plans. The City has every right to use its water as it chooses.

Regarding the ARWRA, the Salinas Comment Letter separately explained that it does not contemplate the use of agriculture produce wash water for the Expansion Project. The ARWRA was "approved based on the EIR as certified" in 2015—long before the Expansion Project was proposed. (ARWRA, pp. 6-7 [Recitals].) The 2019 Amendment did not alter the ARWRA to cover use of Agricultural Wash Water for the Expansion Project.

The Final SEIR merely states that it disagrees with the Salinas Comment Letter, but does not explain why. (See Comment F, p. 4-89.) Instead, the Final SEIR points to Appendix M, an entirely new assessment of source water that was not provided for public review and claims to show for the first time that M1W has sufficient source waters for the Expansion Project without the Agricultural Wash Water. Yet despite the new Appendix M analysis, the Draft SEIR has not been revised to remove Agricultural Wash Water as an intended source for the Expansion Project and continues to rely on it. This continued reliance on Agricultural Wash Water completely ignores the concerns that the City clearly and unequivocally raised on the Draft SEIR.

For the record, the City is now reasserting its position in very plain terms: **M1W does not have any approval or authorization from the City of Salinas to use the City's Agricultural Wash Water for the Expansion Project.** The City has stated its concerns on these issues in its Draft SEIR comments, and to date they have been ignored. Without adequate water rights, and a fulsome analysis of available source waters, **the Expansion Project is not feasible and the Final SEIR should not be certified.**

Unfortunately, the Final SEIR is continuing to place M1W's needs and goals in opposition to those of the Salinas Valley agricultural community – without even attempting to reconcile them through responses to the City's Draft SEIR comments. The City also remains concerned that the Expansion Project is proposing to reduce the water supply for agricultural water deliveries as compared to the previously approved Groundwater Replenishment Project, which means that more water will be taken from the



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Salinas Valley Groundwater Basin without providing a benefit to the Basin. The Final SEIR openly acknowledges that under the new Appendix M analysis, the Expansion Project will further reduce the water available to CSIP by up to 800 AFY and take supplies needed to balance the basin. (Final SEIR, p.3-20 [“In sum, the Proposed Modifications would reduce the future beneficial increase in recycled water that would be available for the CSIP.”].) This is a substantial reduction to one of the important benefits that the Groundwater Replenishment Project provided and puts the Peninsula’s water needs at further odds with those of the Salinas Valley.

If M1W continues to pursue development of a project that relies on the City’s water without its approval, and that reduces benefits to the Salinas Valley Groundwater Basin and undermines efforts to halt saltwater intrusion in the Basin, the City will recommend that the Monterey County Water Resources agency exercise its rights to terminate the ARWRA. The Water Resources Agency secured the water rights under the ARWRA for the purpose of benefiting the Salinas Valley Groundwater Basin, and not as an excuse for the Monterey Peninsula to avoid obtaining its own water supply solution. The ARWRA is not a permanent transfer of water rights to M1W, and in the end, those water rights belong to the Water Resources Agency and not to M1W. If M1W staff believes that it can sacrifice the Salinas Valley Groundwater Basin in order to achieve other political goals on the Monterey Peninsula, it’s time for the Water Resources Agency and water users in the Salinas Valley to go their own way.

The City takes all of these issues very seriously and firmly believes that the Final SEIR before you is inadequate and that the Expansion Project cannot proceed. We appreciate the opportunity to comment and respond to the Final SEIR. Should you have questions or wish clarification on the important issues the City has raised, please contact me at (831) 758-7201.

Regards,

Joe Gunter

Mayor

City of Salinas

cc: *[Monterey County Water Resources Agency]*



Monterey One Water

Providing Cooperative Water Solutions

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July 21, 2020

City of Salinas
Mr. Ray Corpuz
200 Lincoln Avenue
Salinas, CA 93901

Subject: City of Salinas Comments on Supplemental Environmental Impact Report for the Proposed Modifications to Expand the Pure Water Monterey (PWM) Project

Dear Mr. Corpuz,

Monterey One Water (M1W) values the collaborative relationship we have worked hard to build with the City of Salinas through our joint pursuit of beneficial water resource projects which improve the environment and the economy of the region.

Attached to this letter are relevant excerpts from the Final Supplemental Environmental Impact Report (SEIR) for the referenced subject above. These excerpts contain the letter received from the City of Salinas on the Draft SEIR, M1W's corresponding responses, and key appendices referenced in the responses. Please notice that some replies provide an individualized response while others direct you to a Master Response. It is M1W's practice, and allowed by CEQA, to respond to comments on the Draft SEIR in the Final SEIR and to send the Final SEIR to each commenter to ensure comments are addressed in detail, comprehensively, and without conflicts.

While it is important to M1W that the City feel confident its comments were received, analyzed, and addressed, please note the proposed modifications in the SEIR are currently not moving forward. The M1W Board did not act to approve the proposed modifications. As of April 28, 2020, M1W's CEQA consultant work was terminated to avoid additional expenditures. The lack of available resources limited the Agency's ability to respond to any additional comments on the SEIR, including those on the Final SEIR such as the letter submitted by the City on April 27, 2020.

In responding to the City's comments on the Draft SEIR, M1W respected the comments of the City that industrial wastewater and storm water be reserved for **only** the demands identified by the PWM Project as approved in 2015, including for Salinas Valley exclusively. Thus, M1W staff members Bob Holden and Alison Imamura, conducted an analysis (Appendix M) which demonstrates how **other** source waters could be used to meet the yield of the proposed modifications while respecting the City's desire that industrial wastewater and storm water **only** be made available for the **approved** PWM Project, not for an expansion of the PWM Project.

Additionally, approval of contracts for water rights are not required to be secured **prior** to an environmental review. As a point of reference, the following agreements were certified **after** the original

JOINT POWERS AUTHORITY MEMBER ENTITIES: Boronda County Sanitation District, Castroville Community Services District, County of Monterey, Del Rey Oaks, Marina Coast Water District, Monterey, Pacific Grove, Salinas, Sand City, and Seaside

2015 EIR was certified: Amended and Restated Water Recycling Agreement establishing respective water rights to MCWRA and M1W; the water rights issued by the SWRCB for the Reclamation Ditch and the Blanco Drain; and the City's Wastewater Change Petition from the SWRCB allowing diversion of the industrial wastewater to the Regional Treatment Plant for dual use between the PWM Project for groundwater replenishment of the Seaside Basin and the Castroville Seawater Intrusion Project for agricultural irrigation.

We continue to value and uphold the partnership between the City of Salinas and M1W, and we are always be available to meet and discuss any of the information provided or answer additional questions you might have.

Sincerely,



Mike McCullough, MPA
Director of External Affairs

Enclosures

From: [Mike McCullough](#)
To: [Bridget Hoover - NOAA Federal](#); [Paul Sciuto](#)
Cc: [Karen Grimmer - NOAA Federal](#); [Dawn Hayes - NOAA Federal](#)
Subject: Re: MBNMS follow regarding PWM SEIR discussion
Date: Friday, March 26, 2021 9:15:17 PM
Attachments: [CCLEAN-Annual-Report-2018-2019.pdf](#)
[MBNMS - Response to 04.24.20 Ltr.pdf](#)
[MBNMS - Response to 01.30.20 Ltr.pdf](#)
[Outlook-1499118923.png](#)
[Outlook-1499118853.png](#)

Dear Bridget,

We too appreciate everyone taking the time to meet and review your concerns regarding the SEIR on the proposed Expanded Pure Water Monterey Project. As our Board revisits the environmental work for this back-up water supply project, addressing any questions of our peers and community will be key in moving this effort forward.

To further our conversation, I've attached our responses to both letters we received from MBNMS related to the CEQA analysis. Specifically, I hope the response to your second letter from April 2020 assists in addressing your concerns. On April 27, 2020, our Board had directed staff to stop all work on the Expanded PWM Project, therefore, we hadn't been authorized to respond to the topics you brought prior to our call.

In addition, below is a synopsis of our response, and some clarification about PCBs and other legacy pesticides that your email below raises. Let's reconnect once your team has time to review – we would be grateful for the opportunity to discuss these responses.

Regards,
Mike

MBNMS Comments – Summary Response

Analysis of Ammonia, Copper, Dieldrin, and DDT

All source waters for the Pure Water Monterey Project are first processed through primary/secondary wastewater treatment, reducing the concentrations of constituents. The wastewater treatment process at Monterey One Water includes screening, primary sedimentation, secondary biological treatment through trickling filters and a solids contactor, and then clarification. As such, analyzing the worst-case condition of no removal is not required and results in unrealistically high estimates of concentrations in secondary effluent and in reverse osmosis concentrate. Instead, M1W used that method as a conservative, first-pass to narrow down the dozens of constituents in the California Ocean Plan (COP) to those most relevant in the project, just as the CPUC and MBNMS did in the EIS/EIR for the MPWSP. Detailed analysis then followed based on an approach that aligned with the objectives of the COP and considered known treatment efficiency of the processes at the RTP. Methods for analyzing the identified constituents, included:

- **Ammonia:** The maximum six-month median for ammonia was calculated using monthly data from 2000 to 2019 because the minimum COP concentration objective for ammonia is a running six-month median value. A single highest value is not comparable to what would be

evaluated against the COP objective.

- **Copper:** The analysis conservatively used the lowest water quality objective in the COP for copper, a 6-month median limit. However, historical monitoring includes only semi-annual sampling for copper, resulting in only one monitoring result per 6-month period. Instead, copper concentrations were calculated based on all available data on the raw surface waters (all of which currently flow untreated to the Bay) instead of limiting the analysis to six-month time frames. The highest concentrations of raw surface water were not used since copper adhered to solids is known to be low in influent wastewater and removed through primary and secondary treatment as evidenced by our Annual Reports that consistently show copper concentrations in effluent of less than 10 micrograms per liter.
- **Dieldrin and DDT:** The analysis of these constituents in effluent included the results of a bench scale study by Trussell Technologies in 2016. This study was previously reviewed and used for state and federal environmental review for the base PWM Project, including by MBNMS in their PWM Project EA and their Monterey Peninsula Water Supply Project desal EIR/EIS. No additional source waters would be used for the proposed Expanded PWM Project, so analysis utilized the study conclusion that these constituents are removed through treatment prior to discharge and thus a maximum influent concentration for effluent concentration analyses is not accurate. The more that untreated surface waters are diverted to and treated at the RTP, the less of these constituents are discharged without treatment to the Monterey Bay, as further discussed below.

Cumulative Impacts of Adding more PCBs and Other Legacy Pesticides to the Monterey Bay

-

As needed, the Pure Water Monterey Project diverts polluted source waters (e.g., ag drainage water and urban runoff) for treatment and reuse. If not diverted by the PWM Project, these waters would continue to flow untreated to the Salinas River and into the Monterey Bay. All wastewaters and surface waters sent to the Regional Treatment Plant then undergo an extensive primary/secondary treatment process – the process used at Monterey One Water is described above.

With an expansion of Pure Water Monterey, additional secondary effluent that would otherwise flow to the bay would serve as additional influent for the advanced purification process, with agricultural land drainage and urban runoff being used for the base project. The secondary-treated effluent would then undergo ozone disinfection and membrane filtration before the reverse osmosis unit that generates concentrate totaling ~19% of the processed water.

- The base PWM Project and the proposed expansion would both individually and cumulatively reduce the load of all PCBs and legacy pesticides to the bay. Also, note that treated wastewater concentrations and loads are very low. See 2018-2019 CCLEAN Report, attached, at pages 46-62, which concludes:
- There were no exceedances of NPDES permit limits of legacy persistent organic pollutants (POPS) concentrations or loads in wastewater effluent discharged by any of the CCLEAN participants. (pg. 46-47)
- Load comparisons for legacy pollutants from rivers, wastewater effluent, and disposal of

dredged materials confirmed that wastewater effluent discharges account for approx. 2.5% (Table 15 p 59) of the summed loads since 2006. River discharges are the major sources of chlordanes, DDTs, dieldrin, and PCBs, while dredge disposal is a close second to rivers as a source of PCBs. In some years, episodic dredge disposal can account for greater than 90% of total loads to the ocean of chlordanes, DDTs, dieldrin, and PCBs." [NOTE: this study does not account for other, non-river, surface water sources, loads to the bay so the CCLEAN findings that wastewater accounts for 2.5 % of loads from wastewater effluent are considered to be conservatively high.]

Mike McCullough, MPA

Director of External Affairs

O:831-645-4618

C:831-578-5776



From: Bridget Hoover - NOAA Federal <bridget.hoover@noaa.gov>

Sent: Tuesday, March 23, 2021 12:14 PM

To: Paul Sciuto <Paul@my1water.org>; Mike McCullough <MikeM@my1water.org>

Cc: Karen Grimmer - NOAA Federal <KAREN.GRIMMER@noaa.gov>; Dawn Hayes - NOAA Federal <dawn.hayes@noaa.gov>

Subject: MBNMS follow regarding PWM SEIR discussion

Hello Paul and Mike, thank you for taking the time to talk with us on March 9th about the MBNMS comments regarding the PWM draft SEIR. In that meeting, we stated our concerns about the analysis of constituents in the discharge (Dms) and how four were analyzed differently than all the rest without sufficient explanation. We also reiterated our concern regarding the potential cumulative impacts of adding more PCBs and other legacy pesticides to Monterey Bay which regularly exceeds Ocean Plan limits per CCLEAN monitoring.

Until additional analysis is performed for copper, ammonia, DDT and dieldrin; we will have concerns regarding the discharge and compliance with the CA Ocean Plan for the proposed expanded PWM project.

We hope these issues will be addressed prior to the certification of the SEIR by M1W's Board of Directors. We recently read in the Herald that the MPWMD Board approved additional funding to "update the project's environmental document". We would appreciate an email with any updates resulting from our conversation and a commitment that there will be additional analysis conducted well in advance of the NPDES permitting process.

Best, Bridget

Bridget Hoover
Water Quality Protection Program Director
Monterey Bay National Marine Sanctuary
99 Pacific Street Bldg 455
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www.montereybay.noaa.gov/

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Monterey Bay National Marine Sanctuary
99 Pacific Street, Bldg 455a
Monterey, CA 93940

January 30, 2020

Monterey One Water
5 Harris Ct., Bldg. D
Monterey, CA 93940
ATTN: Rachel Gaudoin

Subject: MBNMS Comments on the Draft Supplemental Environmental Impact Report for the proposed expansion of the Pure Water Monterey Ground Water Replenishment Project

Dear Ms. Gaudoin,

On behalf of Monterey Bay National Marine Sanctuary (MBNMS), I submit the following comments in regard to the draft Supplemental Environmental Impact Report (SEIR) for an expanded Pure Water Monterey Ground Water Replenishment Project (PWM).

Monterey One Water (M1W), in partnership with Monterey Peninsula Water Management District (MPWMD), is proposing modifications to the approved PWM that would increase the project yield. The expanded project would serve as a back-up to the California American Water Company (CalAm) Monterey Peninsula Water Supply Project desalination project (MPWSP) in the event that the CalAm desalination project is delayed beyond the Cease and Desist Order deadline of December 31, 2021. The draft SEIR evaluates the proposed modifications, which would increase the amount of purified recycled water produced by 2,250 AFY using the following new and modified facilities: (1) improvements at the approved Advanced Water Purification Facility (AWPF) to increase peak capacity; (2) new product water conveyance facilities; (3) new and relocated injection well facilities, including monitoring wells; and (4) new potable water facilities consisting of four new extraction wells, related pipelines and appurtenances, and treatment facilities.

On March 29, 2019, MBNMS completed and approved an Environmental Assessment (EA) for the PWM project under the National Environmental Protection Act (NEPA) for MBMNS to authorize an NPDES permit for the discharge of AWPF effluent into MBNMS. For this reason, our comments are specifically focused on the discharge related to the proposed expanded project.

Most people think that because waste water effluent is being recycled by highly treating it at the AWPF and then injecting it into the Seaside Ground Water basin, there will be reduced or no discharge into Monterey Bay. However, this is not the case. As proposed, there will be a constant waste stream flowing to MBNMS as a result of the Reverse Osmosis (RO) concentrate from the AWPF. The clean, treated water will be injected into the Seaside ground water basin and up to 1.78 million gallons per day (MGD) of RO concentrate will flow to Monterey Bay. During different times of year, the AWPF RO concentrate will mix with varying amounts of waste water effluent ranging between 0 and 29.6 MGD per day. Currently, without the Pure Water Monterey project, there is almost no secondary treated waste water flowing to the

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Monterey Bay for almost half the year because it is diverted to the Castroville Seawater Intrusion Project (CSIP).

J-2
Cont.

Our comments are as follows:

1. The Draft SEIR found that there would be no impact or less than significant impact to surface water quality and marine biological resources, relying, in part, on the Trussell Technical Memorandum dated September 2019 (Appendix J). We question some of the assumptions used to make these findings. We have the following comments:

- a. The current approved M1W NPDES Permit uses four different dilution minimums (Dm) in the formula to calculate compliance with the CA Ocean Plan. In the draft SEIR, compliance is calculated using 10 Dms, one for each of the scenarios. For purposes of evaluating impacts to water quality and ultimately marine biological resources, the current permit conditions should be applied to the analysis conducted by Trussell using 4 Dms.
- b. The Trussell Tech Memo on page 11 stated that the worst-case concentrations of each constituent in the various source waters was selected for all constituents except for copper and ammonia. These two constituents came closest to exceeding the CA Ocean Plan objectives. For Ammonia, compliance with the CA Ocean Plan is based on a running 6 month median value. For copper, instead of using the highest value found in source water samples, the median was used. The Trussell Tech Memo stated that limited data was available so the median was used and not the six-month median. A footnote in the draft SEIR on page 4.11-15 states that the maximum values detected for copper appear to be "outliers" so the median was used. It is unclear as to why the samples were considered outliers and why there is sufficient samples for all of the other constituents and not for copper. Neither ammonia nor copper should be treated differently than the other constituents and the highest value found in the different source waters should be used in the analysis.
- c. Also, on page 11 of the Trussell Tech memo, there is discussion of the upstream treatment processes to remove DDT and dieldrin from the waste stream. It is not clear how the results are represented in the compliance assessment. Are the values for DDT and dieldrin in Tables 1, 3, and 4 based on the estimated percent of treatment removal or are they based on the worst case assumptions used for all of the other constituents (except copper and ammonia described in b above)?
- d. In general, the modeling and analysis for the Dms and compliance with the CA Ocean Plan should mirror the analysis for the current approved M1W NPDES permit (Order# R3-2018-0017 NPDES # CA00485512) and all constituents should be analyzed using the same assumptions. If there is sufficient justification why the analytical approach needed to adjusted, a comparison should be made for the four constituents identified above in our comment 1.b and 1.c using both approaches.

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2. Under the scenario of no waste water effluent, when only AWPf RO concentrate is being discharged, the PCB concentration is modeled at 70% of the CA Ocean Plan water quality objective. This effluent, high in PCBs, is being discharged into a waterbody that regularly

J-7



exceeds CA Ocean Plan standards for PCBs and is being considered for impairment of beneficial uses. For this reason, special care should be taken to analyze the cumulative impacts on both surface water quality and marine resources regarding the additional contribution of PCBs to MBNMS.

J-7
Cont.

3. On the bottom of page 4.11-10 there is reference to Impact HS-5 for marine water quality impacts due to ocean discharges from the AWPf. This should say HS-4. Impact HS-5 is for alteration to drainage patterns.

J-8

4. On the top of page 4.13-6 it refers to Section 4.10 as Hydrology and Water Quality: Surface Waters. It should say 4.11.

J-9

5. Section 4.13.3 Regulatory Framework; please delete the current narrative except for the last paragraph and insert the language below under National Marine Sanctuary Program Regulations.

The National Marine Sanctuaries Act (NMSA) regulations identify activities that are prohibited in the sanctuaries and establish a system of permits and/or authorizations to allow the conduct of certain types of activities that are otherwise prohibited. Each sanctuary has unique regulatory prohibitions codified within a separate subpart of Title 15, Code of Federal Regulations, Part 922 (i.e., 15 CFR Part 922). Subpart M contains the regulations specific to MBNMS. Section 922.132 of the regulations lists activities that are prohibited or otherwise regulated within the Sanctuary. Among the listed prohibitions, the following prohibited activities relate to the proposed project and may qualify for an authorization, pursuant to Section 922.132(e): Discharging or depositing from within or into the sanctuary any material or other matter, except as specified in A – F of this section. (15 CFR § 922.132(a)(2)(i)).

J-10

The term “authorization” is a specific approval tool described in the NMSA regulations at 15 CFR Section 922.49, which provides, in part, that: A person may conduct an activity prohibited by subparts L through P, or subpart R, if such activity is specifically authorized by any valid Federal, State, or local lease, permit, license, approval, or other authorization issued after the effective date of MBNMS designation, provided that: 1) the applicant notifies the Director of the Office of Ocean and Coastal Resource Management, NOAA, or designee, in writing, of the application for such authorization; 2) the applicant complies with the provisions of Section 922.49; 3) the Director notifies the applicant and authorizing agency that he or she does not object to issuance of the authorization, and; 4) the applicant complies with any terms and conditions the Director deems reasonably necessary to protect sanctuary resources and qualities. Upon completion of the review of the application and information received with respect thereto, the Director shall notify both the agency and applicant, in writing, whether he or she has any objection to issuance and what terms and conditions he or she deems reasonably necessary to protect sanctuary resources and qualities (page 19 EA for MBNMS Authorization of M1W NPDES Permit).



Because an amended NPDES permit will be required for the expanded PWM operations, MBNMS will need to authorize that permit for the discharge to be a legal discharge into MBNMS. NEPA analysis will be necessary before any federal action can be taken. M1W must address the water quality analysis issues identified above in order for MBNMS to complete its NEPA obligations and consider granting an authorization for the NPDES permit for the proposed expansion. .

J-10
Cont.

Thank you for the opportunity to comment on the draft SEIR. Please contact Bridget Hoover at 831-647-4217 or Bridget.Hoover@noaa.gov for any questions regarding our comments.

Sincerely,



Paul Michel
Superintendent

Cc: Peter von Langen, CCRWQCB



Comment Document J: Monterey Bay National Marine Sanctuary/National Oceanic and Atmospheric Administration

J-1 The comment reiterates information in the Draft SEIR. No response is needed.

J-2 The Proposed Modifications would further reduce the volumes of secondary effluent discharged to the Monterey Bay via the M1W ocean outfall. Treatment processes at the RTP, including primary, secondary, tertiary and advanced treatment (purification) reduce the concentrations of constituents that are considered pollutants, including solids, organics, metals, constituents of emerging concern (CECs), pathogens, and viruses. Reducing discharges from the RTP will reduce total pollutant loads for every unit volume of secondary effluent recycled. Specifically, recycled backwash flows from the Salinas Valley Reclamation Plant and the AWPf both contain solids with organic matter and other pollutants adhered to it that would receive further treatment by being recycled back to the RTP primary treatment process. In addition, diversion and treatment of new source waters, such as surface flows in the Blanco Drain, Reclamation Ditch, urban storm water, and agricultural wash water that currently flow to the environment will also be used by the PWM/GWR Project resulting in further reduction of the untreated pollutant/constituent loads to the Tembladero Slough/Moss Landing Harbor (Reclamation Ditch) or to the Salinas River (other source waters) and then to the Monterey Bay.

The influent to the AWPf is secondary treated water and thus any additional purified recycled water produced by the AWPf would represent some reduction in secondary effluent to the Bay. The volume of reverse osmosis (RO) concentrate discharge from the AWPf is 19% or less of the volume of AWPf influent and prior to the reverse osmosis process, the secondary effluent is treated through ozonation and membrane filtration (MF), reducing pollutant concentrations before being concentrated in the RO treatment process.

The ozonation process at the AWPf is effective at the destruction of organic constituents and CECs⁵ that may be present in the secondary effluent, which leads to a lower concentration of CECs in the RO permeate and in the RO concentrate that is discharged to the ocean (a reduction in pollutant load). In addition, ozonation is effective at inactivating pathogens, especially viruses. The MF system is effective at removing any remaining particulate matter prior to the water becoming influent to the RO system. That particulate matter contains bound or adhered pollutants. A majority of the particles that are captured by the MF system are backwashed during filter backwash cycles when the water is sent to the waste system which in turn, pumps this filter backwash back to the RTP headworks for further treatment.

⁵ Constituents of emerging concern are generally chemicals for which there are no established water quality standards. These chemicals may be present in waters at very low concentrations and are now detected as the result of more sensitive analytical methods. CECs include several types of chemicals such as pesticides, pharmaceuticals and ingredients in personal care products, veterinary medicines, endocrine disruptors, and others.

The reductions of ocean discharge volumes in a typical dry and normal or wet year is shown in **Table 4-A**, below for both the Approved PWM/GWR Project and the Project with the Proposed Modifications. The net reductions in discharges are also shown (i.e., reduction would be less considering the reverse osmosis concentrate from the AWPf as an additional discharge).

Table 4-A: Ocean Discharge Volumes under the PWM/GWR Project

	Acre-Feet per year (AFY)	Annual average daily volumes (MGD)
Dry Year		
<i>Reduction in Secondary Effluent (approved Project)</i>	2,897	2.6
<i>Reduction in Secondary Effluent (with Modifications)</i>	4,239	3.8
<i>Net Reduction in Volume (approved Project)</i>	2,191	2.0
<i>Net Reduction in Volume (with Modifications)</i>	3,007	2.7
Normal/Wet Year while Building Drought Reserve		
<i>Reduction in Secondary Effluent (approved Project)</i>	4,989	4.5
<i>Reduction in Secondary Effluent (with Modifications)</i>	6,975	6.2
<i>Net Reduction in Volume (approved Project)</i>	3,978	3.6
<i>Net Reduction in Volume (with Modifications)</i>	5,439	4.9

NOTES:

1. Source: Schaaf & Wheeler (October 2017) and Bob Holden (M1W/DD&A, October 2017).
2. Source: Schaaf & Wheeler (November 2019) and Bob Holden (M1W/DD&A, November 2019).
3. RTP influent wastewater volumes have decreased slightly since the EIR baseline 2009-2013, including drought years. However, ocean discharge volumes are more influenced by the use of the Salinas River Diversion Facility for agricultural irrigation during wet and normal years. Therefore, use of EIR assumptions for baseline is considered appropriate for this analysis.

The approved PWM/GWR Project would also continue to reduce pollutant loads to the Bay from impaired surface waters.

J-3

The minimum probable initial dilution (D_m) is determined using models that consider ocean conditions, velocity and volume of discharge, the density of the discharge, *etc.* M1W's existing NPDES Permit uses D_m values that were determined based on the current Advanced Water Purification Facility's (AWPF's) discharge characteristics. Because the proposed expansion would change the velocity and volume of discharge and the density of the discharge, the D_m values for the expansion project are not equivalent to the current NPDES Permit D_m values. Therefore, it would not be appropriate to evaluate California Ocean Plan compliance using the D_m values in M1W's existing NPDES Permit. The 2015 PWM/GWR Final EIR's Ocean Plan analysis conducted for the approved PWM/GWR Project did not only consider the D_m value in M1W's previous NPDES permit (their discharge permit at the time), but instead considered the D_m values relevant to future projected discharge scenarios including the modeled characteristics of the project as proposed (and now constructed). This

same approach was used to evaluate the Proposed Modifications to the PWM/GWR Project.

J-4 It would be incorrect to consider just the highest copper and ammonia values measured in the different source waters. One sample of raw new source water had a high concentration of copper that would not be representative of final effluent because this result was measured before wastewater treatment. Prior to discharge, removal of copper through wastewater treatment will occur. In addition, a single high data point in the raw source water would be even less representative of a six-month median in the final effluent.

Under the previous NPDES permit, the secondary effluent copper concentration was monitored once every six months. This resulted in a limited ability to calculate a representative 6-month median, so all of the available data were used to determine the median value. The resulting concentration was compared to the California Ocean Plan six-month median objective for copper.

Nearly two decades of monthly secondary effluent ammonia monitoring results were evaluated (starting in January 2000). The maximum six-month median was determined to be most representative of future compliance requirements and was compared to the California Ocean Plan six-month median objective for ammonia. The maximum concentrations detected for copper and ammonia were within compliance with the California Ocean Plan daily maximum and instantaneous maximum objectives.

J-5 Per Footnote 14 of Table 1 on page 17 of Appendix J of the Draft SEIR: “The value presented represents a calculated value assuming 93% and 84% removal through primary and secondary treatment for DDT and dieldrin, respectively, 36% and 44% removal through ozone for DDT and dieldrin, respectively, 92% and 97% removal through MF for DDT and dieldrin, respectively, recycling of the MF backwash to the RTP, complete rejection through the RO membrane, and an 81% RO recovery. The assumed removals are based on results from ozone bench-scale testing of Blanco Drain water blended with secondary effluent and low detection sampling through the RTP.”

J-6 The modeling and analysis for the Dm values and compliance with the California Ocean Plan that was prepared for the Draft SEIR did mirror the analysis for the current approved M1W NPDES permit (Order# R3-2018-0017 NPDES # CA00485512). The analysis of the four constituents noted in comments 1.b and 1.c mirrored the approach used for the current approved NPDES permit.

J-7 The effluent concentrations of PCB’s were determined to be below the existing water quality standard as defined in the California Ocean Plan; therefore, discharges from M1W would not contribute to any exceedances of this standard. The water quality standards are established to protect water quality and marine resources. CCLEAN sampling and analysis also found that no exceedances of water quality standards result from M1W discharges. The vast majority of contributions to PCB load to the Monterey Bay are due to river loads and dredging (approximately 98% of the PCB load), with approximately 2% being contributed from all wastewater treatment plant

discharges (Cities of Santa Cruz and Watsonville, Carmel Area Wastewater District, and Monterey One Water). See Table 15 (page 59) of the draft Annual Report 2018-2019 (CCLEAN, January 31, 2020) found at <http://www.cclean.org/knowledge-base/>.

- J-8** The text of page 4.11-10 of the Draft SEIR has been updated in response to this comment. See **Chapter 5, Changes to the Draft SEIR**.
- J-9** The text of page 4.13-6 of the Draft SEIR on has been updated in response to this comment. See **Chapter 5, Changes to the Draft SEIR**.
- J-10** The text of pages 4.13-3 to 4.13-4 and page 2-33 of the Draft SEIR have been updated in response to this comment. See **Chapter 5, Changes to the Draft SEIR**. If NEPA review is required for an amended NPDES permit, it could be completed expeditiously, similar to the environmental assessment (EA) that was completed for the approved PWM/GWR Project. Moreover, the NEPA review would not be needed before the start of construction.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Monterey Bay National Marine Sanctuary
99 Pacific Street, Bldg 455a
Monterey, CA 93940

April 24, 2020

Mr. Paul Sciuto
General Manager
Monterey One Water
5 Harris Ct., Bldg. D
Monterey, CA 93940

Subject: Monterey Bay National Marine Sanctuary's response to Monterey One Water regarding comments on the draft Final Supplemental Environmental Impact Report for the proposed expansion of the Pure Water Monterey Ground Water Replenishment Project

Dear Mr. Sciuto,

Monterey Bay National Marine Sanctuary (MBNMS) has reviewed the Monterey One Water (MIW) draft Final Supplemental Environmental Impact Report (SEIR) for an expanded Pure Water Monterey Ground Water Replenishment Project (PWM), which includes MIW's response to our comments. As you know, MBNMS' comments on the draft SEIR focused on the proposed combined discharge of secondary treated effluent and advanced water treatment facility effluent to the sanctuary.

The draft SEIR stated that "Trussell Tech developed a conservative approach, which involved assuming the worst-case conditions for discharge. The estimated worst-case water quality of the discharge was compared to the Ocean Plan objectives to assess compliance." MBNMS comments questioned why four constituents (ammonia, copper, dieldrin and DDT) were treated differently in the analysis for compliance with the California Ocean Plan (COP) than all of the other constituents listed in the COP. One could assume the rationale is that these constituents, when modeled, were close to exceeding their water quality objectives. We also recommended the analysis be consistent with the current NPDES permit allowing for four Dms. Unfortunately, MIW's responses did not adequately address our comments.

If the PWM expansion moves forward, it will require an amended NPDES permit from the Central Coast Regional Water Quality Control Board. Under the Code of Federal Regulations Title 15 Section 922.132(a)(2), MBNMS must authorize that permit for the additional discharge to be a legal discharge into MBNMS. In March of 2019, MBNMS produced an Environmental Assessment (<https://montereybay.noaa.gov/resourcepro/resmanissues/desal-projects.html>) focused on Phase One of the PWM project, and it did not include an analysis for the expanded project, as that was not part of the permit application. For the expanded project, we will also need to conduct National Environmental Policy Act (NEPA). We expect our questions and comments will be resolved during the permitting process. At that time, we will make a determination as to the level of NEPA analysis required for our federal action of authorizing the Water Board's NPDES permit. We recommend addressing these outstanding questions and

dear Mr. Sciuto

issues prior to permitting, to ensure an efficient process. Should you have any questions or follow-up, please contact Bridget Hoover on my staff at bridget.hoover@noaa.gov.

Sincerely,

Paul Michel

Paul Michel
Superintendent

Cc: Peter von Langen, California Regional Water Quality Control Board



Responses to Monterey Bay National Marine Sanctuary Letter

Dated April 24, 2020

Specific Response to Comment A

The Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment (PWM/GWR) Project provided a response to this comment on page 4-143. This response provides further detail and explanation about the comments raised.

The water quality analysis in an Environmental Impact Report is not required to assume a worst-case concentration in every component of a treatment plant's influent flows as being applicable to the assumed secondary effluent concentration in a flow-weighted analysis. Treatment processes at the Regional Treatment Plant reduce concentrations of constituents; therefore, a worst-case analysis such as is suggested is not a requirement of the California Ocean Plan, Central Coast Regional Water Quality Control Board's Basin Plan, the Sanctuary regulations, nor the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA). In fact, the Local Limits Evaluations under the U.S. Environmental Protection Agency Pretreatment Control requirement accounts for treatment plant constituent removal efficiencies. The use of worst-case concentrations for most constituents was a conservative, first-pass assumption that enabled Monterey One Water (M1W) and its consultant team to narrow down the dozens of constituents in the Ocean Plan tables to those that would be the closest to the Ocean Plan objective to enable detailed analysis of key constituents of concern.

Consistent with the parallel analyses in the certified Final EIR for the PWM/GWR Project and the CPUC and MBNMS's EIS/EIR for the MPWSP, the maximum six-month median for ammonia was calculated using monthly data from 2000 to 2019 because the minimum Ocean Plan concentration objective for ammonia is a running six-month median value and thus a single highest value is not comparable to the objective. Similarly, when assessing compliance with the water quality objective for copper, the analysis approach addressed the lowest water quality objective in the Ocean Plan for copper, a 6-month median limit. For that reason, it is accurate and appropriate to assess compliance with the objective on the same basis, e.g., the 6-month median concentration of copper in the future discharge. Historical monitoring requirements for the RTP included semi-annual sampling for copper, which resulted in an inability to calculate a representative 6-month median concentration for copper in the secondary effluent (i.e., each 6-month period had only one monitoring result). Similarly, there were limited data available from the new source waters. To calculate a representative median concentration for copper, all available data were used instead of limiting the analysis to six-month time frames. This information was presented in the Draft SEIR in Appendix J, on page 11 (Trussell Technologies, September 2019).

To evaluate and account for the effect of treatment processes upstream of reverse osmosis process at the AWPf on the concentration of dieldrin and DDT, an additional refinement was performed based on bench scale sampling, testing and analysis of these constituents conducted in 2014 for the approved PWM/GWR Project. This analysis was previously reviewed and vetted by the Regional Water Quality Control Board and the Monterey Bay National Marine Sanctuary, by inclusion in the approved Engineering Report, and in the application for an amended NPDES Permit (i.e., November 2017 Report of Waste Discharge that included the approved PWM/GWR Project). The bench-scale study determined removal through the RTP, ozone and membrane filtration processes. The results provided a higher level of accuracy to the calculated

values in secondary effluent, reflecting measured removal efficiencies (concentration reductions) of 93% and 84% through primary and secondary treatment for DDT and dieldrin, respectively, 36% and 44% through ozone for DDT and dieldrin, respectively, 92% and 97% through MF for DDT and dieldrin, respectively (Trussell Tech, 2016b). In addition to being included in the approved Engineering Report, and Report of Waste Discharge, this information was described in the Ocean Plan Compliance Technical Memorandum (Appendix J) on page 11 (Trussell Tech, September 2019).

Specific Response to Comment B

The Final EIR provided a response to this comment on page 4-142. The following response provides further detail and explanation about the comment raised.

The EIR is not required to analyze whether a project could comply with an *existing* NPDES permit if an amended permit is required to operate the project unless significance criteria of a lead agency requires it. The SEIR disclosed that the existing NPDES permit would be amended prior to operating the AWPf at capacity above 5 mgd. The four (4) minimum probable dilution values for ocean mixing (D_m value) currently in M1W's NPDES permit would be adjusted or new D_m values added under an amended permit prior to operation of a higher capacity AWPf. The California Ocean Plan water quality analysis in the SEIR included modeling of discharges for a large number of dilution conditions reflecting various combinations of treated secondary effluent and the AWPf reverse osmosis concentrate. This modeling demonstrated that the Proposed Modifications would comply with the Ocean Plan under a full range of discharge and dilution conditions (from no secondary effluent to 29.6 mgd of secondary effluent assuming 1.78 mgd, or the maximum, reverse osmosis concentrate flow). Minimum D_m values would be developed as part of the permit process to ensure that the RTP and AWPf operations comply with the Ocean Plan in all situations.

It is worth noting that this is the same analysis that was conducted in the CPUC and MBNMS EIS/EIR for the MPWSP desalination project. If the MPWSP brine discharge had to be evaluated using the existing NPDES permit requirements, then the NEPA/CEQA document's Ocean Plan analysis would have had to find significant and unavoidable impacts to marine water quality. Namely, the MPWSP triggers the need for numerous D_m values (currently assumed to be a minimum of 8); this differs from both the single D_m in the NPDES permit (Order R3- 2014-0013) that was applicable at the time of preparation of the MPWSP EIS/EIR and from the four D_m values that are now applicable. Upon commencement of NPDES permitting for the MPWSP, M1W will need to work with CalAm and the RWQCB to develop appropriate D_m values and brine volumetric flowrate requirements for the brine discharge into M1W's outfall. This would occur in preparation for submittal of the Report of Waste Discharge (NPDES application) for the NPDES amendment needed for the MPWSP. The new applicable D_m values will be developed based in part on the modeling conducted for the MPWSP and in part on final design and mitigation requirements of the MPWSP project. Compliance with the Ocean Plan and potentially with Sanctuary regulations will require discharging only high flow rates of desalination brine and constructing modifications to the ocean outfall diffusers and end gate per the EIS/EIR.

Specific Response to Comments C

This comment is correct and consistent with the language in the Final SEIR on pages 5-7 and 5-19, which show changes to pages 2-33 and 4.13-3 the Draft SEIR.

Specific Response to Comment D

This comment is correct and is consistent with the language in the Final SEIR on pages 4-140, 4-144, and 5-19, the latter of which shows changes to pages 4.13.-3 of the Draft SEIR.

In 2018-2019, MBNMS and the NOAA Office of National Marine Sanctuary (ONMS) with assistance by M1W staff, prepared an Environmental Assessment (EA) culminating with MBNMS issuing a Finding of No Significant Impact (FONSI) in compliance with NEPA to support their authorization of NPDES permit amendment allowing changes to ocean outfall discharges from the Regional Treatment Plant due to the PWM/GWR Project. Typically, authorizations by the MBNMS of amendments to NPDES-permitted discharges (NPDES amendments) are found to be exempt from NEPA. The ONMS chose to require an EA with a FONSI, rather than using a NEPA exemption, due to the cumulative impact of the MPWSP desalination plant operating together with the 5 mgd capacity AWPf of the approved PWM/GWR Project, which would result in a *significant cumulative* impact on marine water quality requiring mitigation. The proposed modifications to expand the PWM/GWR Project were evaluated to be operational only if the MPWSP desalination project is not delivering water for the same purpose. Therefore, this cumulative impact is not applicable to the Expanded PWM/GWR Project because if the MPWSP is operating to deliver water for the purpose identified in its EIS/EIR, the SEIR assumes that the PWM/GWR Project would only operate up to its existing, currently-approved, capacity AWPf (5 mgd).

MBNMS began their NEPA process for the approved Project *after* the ROWD application was submitted to the RWQCB. This differs from the NEPA process for the MPWSP because NEPA is required to be complete BEFORE construction within the Sanctuary boundaries. Specifically, the MBNMS issues permits for construction work in the Sanctuary; for the MPWSP a Sanctuary permit was needed prior to construction of outfall modifications component of the MPWSP and for the slant wells that extend into the Sanctuary boundaries.

For the Proposed Modifications to the PWM/GWR Project, it is currently not timely to commence any MBNMS NEPA process, because M1W would not seek to amend its NPDES permit until after approval of the project by M1W and after securing funding for construction of any Proposed Modifications (a Water Purchase Agreement or amended Water Purchase Agreement would be needed). A Report of Waste Discharge would be submitted *after* the project design is complete. For the base project, M1W's NPDES amendment process and the associated MBNMS NEPA occurred *during* plant construction because M1W did not need authorization for the new NPDES until operating the plant at full capacity. Specially, the M1W ROWD was submitted to MBNMS and the RWQCB in Nov. 2017 in compliance with the MOU describe above. The NPDES amendment was approved by the RWQCB, *after* the RWQCB and M1W addressed all of NOAA ONMS and MBNMS comments, in Dec 2018. NOAA ONMS signed the FONSI shortly thereafter in early 2019, which was about 10 months before the AWPf was operating. The NOAA ONMS EA process thus occurred in parallel, with construction.

Summary

The analysis provided in the SEIR complies with the California Environmental Quality Act. The analysis provided a quantitative and appropriately conservative analysis of the marine water quality and marine biological impacts of the Proposed Modifications to the PWM/GWR Project. Namely, the SEIR found that the Proposed Modifications would comply with the California Ocean Plan and thus would not result in a significant impact on marine water quality and marine biological impacts based on the relevant significance criteria in the EIR and SEIR and the modeling results. Specifically, only one constituent in one model run exceed 80% of the objective where compliance is achievable with any result under 100% of the

objective. Ammonia was estimated to reach a concentration closest to its objective, where it is 82% of the objective in one out of ten of the discharge flow scenarios. The SEIR's water quality analyses uses the same methodology and significance criteria, as the analyses in the MPWSP EIS/EIR prepared by the CPUC and NOAA Office of National Marine Sanctuaries (ONMS) and by M1W in the certified Final EIR for the approved PWM/GWR Project. The relevant water quality modeling analyses were prepared by the same consultant, Trussell Technologies. The modeling methodologies have been accepted and used by the Regional Water Quality Control Board and the Monterey Bay National Marine Sanctuary in their discretionary approvals of M1W's amended NPDES permit for operating the approved PWM/GWR Project.

These comments do raise any "new substantial information" that would cause the contents or procedural aspects of the SEIR to be inadequate. Pursuant to Section 15088.5, the comments do not present any new significant environmental impacts, nor do they raise any environmental information that demonstrate that there would be an increase in severity of any previously identified significant impacts. The comments do not propose new feasible mitigation measures nor alternatives that would reduce the significant environmental impacts but that M1W refuses to implement. Therefore, the water quality and marine biological resources analyses in the Final SEIR, which incorporates the Draft SEIR, are considered adequate even after consideration of these comments and the SEIR is in compliance with CEQA pursuant to the conclusions in the Final SEIR.

April 15, 2021

To: Chair Carbone and Members of the Board and Staff of M1Water

Thank you very much for all the work and care that have gone into developing Pure Water Monterey (PWM) and making it such a practical, environmentally and economically sensible new water source.

Thank you also for your work and vision in developing the Supplemental Environmental Impact Report (SEIR) for a potential PWM Expansion and for authorizing work to update it. Updating the SEIR is a rational and prudent way to examine and clarify the environmental aspects of the Expansion and a good way to reassure everyone that the Expansion will not harm the environment.

I hope the updated SEIR will be easy for everyone to read and understand. If people find it difficult to read and cannot find or fully understand the facts that address their concerns, they may rely on rumors and/or inaccurate interpretations by others.

If possible, please include a table of contents, numbered pages, a glossary of abbreviations and technical terms, and summaries and highlights at the beginning of each section. Whenever other documents are referenced, such as the original EIR, please include the referenced text and tables, or if that is not practical, please make it easy for readers to find the right sections of the referenced document(s).

It is also important that everyone understands that the SEIR addresses only the environmental aspects of the Expansion, and that the SEIR is not an economic feasibility report. (That can come later if needed.)

Also, that certifying the SEIR does not commit you to proceeding with the Expansion. I do not know of any individuals or groups that will seek to pressure M1Water to pay for building the Expansion. I think everyone understands that M1Water will not proceed with it unless there is a buyer for the water. Without a Water Purchase Agreement, nothing more will be done.

There have been many sources of worry during the pandemic, but the updated SEIR should not be one of them. I look forward to reading it and hope it will be approved. If so, you will then have more time to continue the good thinking and great work that you as M1Water board and staff members do so well.

Thank you.

Sincerely,

Marli Melton

Marli Melton, Carmel Valley



Howard “Chip” Wilkins III
cwilkins@rmmenvirolaw.com

April 22, 2021

Via E-mail Only

Mary Ann Carbone, Chair
Board of Directors
Monterey One Water
5 Harris Court, Building D
Monterey, CA 93940

Re: Marina Coast Water District’s Comments on the 2021 Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Project and Proposed Resolutions to Conditionally Approve the Proposed Modifications (SCH No. 2013051094.)

Dear Chair Carbone and Directors:

On behalf of our client, the Marina Coast Water District (“MCWD”), we submit these comments regarding the 2021 Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (“PWM Expansion” or “Project”) and the proposed resolutions to conditionally approve the Project. This letter supplements MCWD’s comments on the Draft SEIR. MCWD again wishes to convey its full support for the Monterey One Water’s (“M1W”) and Monterey Peninsula Water Management District’s (“MPWMD”) objectives for the proposed PWM Expansion Project—i.e., to replenish the Seaside Groundwater Basin with 2,250 AFY of additional purified recycled water to replace Cal-Am’s use of existing water sources. These comments should not be construed in any way to suggest MCWD opposes or is not willing to work with M1W and MPWMD to find solutions for any issues involving the ASR, PWM and PWM Expansion projects. Rather, MCWD’s concerns relate to the Cal-Am proposed infrastructure included in the Project, which we continue to believe is designed to facilitate the Monterey Peninsula Water Supply Project (MPWSP) and that Cal-Am is attempting to avoid supplemental review of the MPWSP by the California Public Utilities Commission (CPUC) and avoid the mitigation requirements imposed by the CPUC in the MPWSP EIR/EIS. The purpose of this letter is two-fold.

Initially, as explained in our prior comments, MCWD is confident that M1W will ensure MCWD’s senior contractual rights are fully protected or a mutually beneficial resolution of those rights is achieved that allows both the Project to move forward and MCWD to meet the present and planned future water supply needs of the District’s service area. To that end, we request that

M1W consult with MCWD regarding the Regional Dynamic Water Balance Model Project that was approved at your March 29, 2021 Board meeting.

Second, MCWD believes changes and clarifications to the proposed CEQA findings and approval resolution are necessary to ensure M1W's intent in conditionally approving the Project is clear and that the resolutions comply with the California Environmental Quality Act ("CEQA") (Public Resources Code, § 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., titl.14, § 15000 et seq.). Foremost, MCWD believes the Project approval resolutions must be modified to remove or reduce Cal-Am Distribution System elements that are unnecessary—or at minimum oversized—to meet the Project's purpose and objectives.

I. Cal-Am's proposed new 36" pipeline is unnecessary—or at minimum oversized—and should be reduced or removed from the Project to avoid potential growth inducing impacts.

As explained in MCWD's comments on the Draft SEIR, Cal-Am's proposed new 36" pipeline is more than four times larger than what is needed for the PWM Expansion Project¹ and MCWD's existing product water conveyance pipeline would appear to have adequate capacity to accommodate the PWM Expansion flows. In response to MCWD's comments, the Final SEIR was revised to include the following explanation:

... Under the current ASR system operation, water supply from the Carmel River is conveyed from the CalAm Monterey service area main distribution system through a 30-inch MCWD-owned pipeline in General Jim Moore Blvd to the ASR wells. Water flows north in the 30-inch pipeline during ASR injection and when extraction is occurring from ASR wells, the same pipeline conveys water south to CalAm customers. Under the PWM Expansion, PWM extraction time periods will seasonally overlap with ASR injection time periods (see Figure 8 of the Montgomery & Associates Technical Memorandum in Appendix D of the Draft SEIR). During these periods, separate pipelines for ASR well injection and Seaside Groundwater Basin extraction will be needed and full extraction capabilities from two of the proposed new extraction wells would be needed at a minimum. The Proposed Modifications were conceptually designed to accommodate CalAm needs (peak day demand and total customer demand)...
[FN]] *This may occur for short durations during a future peak demand day when all of the following occur simultaneously: CalAm's other water supplies sources are not available, the largest non-ASR well is out of service (Paralta), and ASR 1, 2, 3, and 4 are all unavailable for Seaside Groundwater Basin extractions due to maintenance or rehabilitation, injections, or the resting period between injection and extraction. These facilities are conceptually designed to meet peak demands during this set of conditions.*

¹ Cal-Am's proposed new 36" pipeline would have a flow capacity of 15,682 gpm when flowing at a normal 5 feet-per-second, and a maximum capacity of 22,207 gpm when flowing at 7 feet-per-second. The PWM Expansion maximum flow rate is only 4,000 gpm.

(Final SEIR, p. 5-6, emphasis added.)

As the above quotation from the Final SEIR states, CalAm's alleged need for the pipeline would only occur, if ever, for a short duration during a future peak demand day when CalAm has failed to properly plan, operate, and maintain its system and infrastructure. Including the pipeline in the Project would provide M1W's endorsement of CalAm passing on a significant unnecessary cost to its ratepayers, added to all of its necessary costs plus its guaranteed rate of return to shareholders, which is currently 7.52 %.

MCWD does not believe revisions to the SEIR justify a new 36" pipeline. As we noted in our prior comments to the MPWMD Board when it rejected Cal-Am's proposal to build this same pipeline as part of the existing ASR project:

- ASR water can only be injected December through May when there is sufficient Carmel River flow in excess of bypass flow requirements. For the nine years from 2011 through 2019, CalAm only diverted ASR injection water in three of the nine years during the month of May, or 33% of the time. Presumably, that means that in the other six years Carmel River flows were not in excess of bypass flow requirements.
- The maximum amount of ASR water that can be sent via the Segunda/Crest Pipeline in May is 96 AF. Under CalAm's proposal, any available Carmel River water in excess of 96 AF would not be diverted for injection, but could be used to serve the Carmel Valley and a portion of the City of Carmel under Permit 21330.
- Therefore, even though CalAm diverted 103.18 AF for injection in May 2019, 338.38 AF in May 2017, and 198.2 AF in May 2011, with the proposed new 36" pipeline, CalAm could still only divert 96 AF in May via the Segunda/Crest pipeline. The rest of the ASR injection water would have gone "around the horn" via Pacific Grove to ASR Wells 1 and 2. Under CalAm's proposal, the excess ASR injection water would not be diverted to go via New Monterey Pipeline because that would block any extracted PWM water.
- Based this information it is estimated that CalAm will only be able to divert a maximum of 96 AF during the month of May 33% of the time and assuming at the same time there was unmet demand south of Seaside to Pebble Beach.

Moreover, as MCWD explained in its comments to the MPWMD when it rejected Cal-Am's proposed new pipeline, if Cal-Am wants to inject and extract ASR water simultaneously under some maximum demand scenario that may never occur, there are likely multiple solutions that are both less expensive and would substantially lessen the environmental impacts of constructing and operating a new 36" pipeline. Most notably, CalAm's Water Right Permit 21330 allows CalAm to divert 1,488 AFY during December through May under the same bypass flow conditions as the ASR permits, except that Permit 21330 water may be used directly to serve CalAm customers. The major problem is that the authorized place of use is limited to the Carmel River watershed only. The obvious solution would be for CalAm to petition the SWRCB to amend Permit 21330 to have the same authorized place of use as the ASR permits, i.e., within the boundaries of the entire MPWMD. Unlike CalAm's proposal to run water via the

Segunda/Crest Pipeline, this alternative could provide supplemental water from the Carmel River system to directly serve customers within the Cities of Carmel, Pebble Beach, Pacific Grove, and Monterey if needed, during December through May. Besides saving the cost of building a new bypass pipeline, CalAm would also save the additional cost of transporting and injecting this water into the Seaside Basin and extracting and transporting the same quantity of PWM water from the Seaside Basin. This also results in no net change in the cumulative amount of PWM water and ASR water in storage.

Based on the foregoing, MCWD believes the proposed new 36" pipeline is not needed for the PWM Expansion Project but is instead proposed by Cal-Am to belatedly address deficiencies in the MPWSP. To the extent that these facilities are needed by Cal-Am to accommodate MPWSP desal water, the CPUC is the only appropriate lead agency under CEQA and the Public Utilities Code as MCWD explained in comments on the Draft SEIR.

If M1W determines utilizing MCWD's potable water pipeline or amending Cal-Am's Water Right Permits is feasible to address any short durations during future peak demand days when the new pipeline could potentially be needed, MCWD believes it is beyond dispute that the proposed 36" pipeline is dramatically oversized given Cal-Am's other system constraints (i.e., Segunda/Crest pipeline). To accommodate the hypothetical short durations during future peak demand days when a new pipeline might be needed, a 24" pipeline would still provide more capacity than Cal-Am needs to move water north and south at the same time.

Finally, if M1W approves the project with Cal-Am's new pipeline, it should make clear in its findings that the SEIR only addresses mitigation and alternatives to Cal-Am's pipeline if the PWM Expansion Project is built. Under the currently proposed resolutions certifying the Final SEIR and conditionally approving the Project, Cal-Am can seek permits and build the pipeline even if it never enters into a water purchase agreement with M1W and the PWM Expansion project is never built. As explained in MCWD's comment on the SEIR, there are additional mitigation measures that must be required (and potential alternatives) if the pipeline is constructed for the MPWSP and PWM Expansion is never built, in order to comply with CEQA. As the Final SEIR acknowledges in its responses to comments from MCWD:

The desalination project is a separate, independent project. If CalAm proposes in the future to connect pipelines of the Proposed Modifications to other pipelines in a way that is not described nor evaluated in the SEIR, **then another CEQA review may be necessary prior to allowing that to occur.**

(Final SEIR, p. 4-102 – 4-103, emphasis added.) Therefore, to address the situation where Cal-Am proposes to build the pipeline based on the environmental analysis in the SEIR without or before entering a WPA for PWM Expansion, we have proposed language below to ensure the CEQA process is not manipulated.

II. Cal-Am's proposed extraction wells EW-3 and EW-4 are unnecessary and should be removed from the Project to avoid potential growth inducing impacts.

MCWD also continues to support the elimination of extraction wells EW-3 and EW-4 as they are not needed for PWM Expansion and cannot be justified given their significant and unavoidable impacts.

As explained in MCWD comments on the Draft SEIR, each of Cal-Am's four proposed new extraction wells are sized at 1750 gpm, which equates to a new extraction capacity of 2,823 AFY per well, or a total new extraction capacity of 11,292 AFY. The PWM Expansion only proposes to add 2,250 AFY of new supply. The additional extraction well expansion capacity is more than five times larger than the supply being added by the PWM Expansion Project. Therefore, eliminating extraction wells EW-3 and EW-4 would provide more than sufficient pumping capacity as well as redundancy for the PWM Expansion and would meet all of the project objectives as the SEIR acknowledges. Given that this alternative would greatly decrease the Project's significant and unavoidable noise impacts, there is insufficient evidence to support the proposed Statement of Overriding Considerations.

Finally, if M1W approves the project with Cal-Am's extraction wells EW-3 and EW-4, it should make clear in its findings that the SEIR only address mitigation and alternatives to Cal-Am's extraction wells EW-3 and EW-4 if the PWM Expansion Project is built. Under the currently proposed resolutions certifying the Final SEIR and conditionally approving the Project, Cal-Am can seek permits and build the extraction wells EW-3 and EW-4, and extraction wells EW-1 and EW-2 as well, even if it never enters into a water purchase agreement with M1W and the PWM Expansion project is never built. M1W has no approval authority relating to Cal-Am's proposed extraction wells. Therefore, to address the situation where Cal-Am proposes to build the extraction wells based on the environmental analysis in the SEIR without or before entering into a WPA for PWM Expansion, we have proposed language below to ensure the CEQA process is not manipulated.

III. Proposed Changes to Draft Resolution 2021-05 CEQA Findings.

MCWD proposes M1W revise "Draft Resolution 2021-05 CEQA Findings" for Finding II(C)(2)(b) [*Discussion and Findings Relating to the Alternatives Evaluated in the Draft SEIR*] on p. 13 as follows:

Elimination of Extraction Wells EW-3 and EW-4 Alternative

This alternative consists of the elimination of Extraction Wells, called EW-3 and EW-4, from the Proposed Modifications, while still including construction of treatment facilities at the site that was proposed for EW-3. This alternative would reduce the total number of Extraction Wells from four to two. All the other Proposed Modifications would be constructed and operated as described in the Draft SEIR. Under this alternative, Extraction Wells EW-1, EW-2, as well as CalAm's existing extraction wells, would be operated at an increased

capacity to offset the elimination of Extraction Wells EW-3 and EW-4, and backflush, treatment and conveyance facilities would still be built.

This alternative would eliminate the new, significant and unavoidable construction noise impact of the Proposed Modifications. Other than the elimination of the significant unavoidable noise impact at this location, all other impacts would remain unchanged or be reduced due to the reduced footprint and facilities at this project location.

The Board find this alternative is environmentally superior and the Proposed Modifications can operate without EW-3 and EW-4. This alternative would meet all of the project objectives, including the primary objective of reducing discharges of secondary effluent to Monterey Bay and replenishing the Seaside Groundwater Basin with 2,250 AFY of additional purified recycled water to replace CalAm's use of existing water sources.

Summary of Findings Regarding Alternatives

For all of the foregoing reasons, the Board has determined to approve the Elimination of Extraction Wells EW-3 and EW-4 Alternative, instead of any of the other alternatives evaluated in the Draft SEIR. On balance, the Board finds that the Elimination of Extraction Wells EW-3 and EW-4 Alternative best achieves the project objectives and environmental benefits.

MCWD proposes M1W add the following language to "Draft Resolution 2021-05 CEQA Findings" for Finding II(C)(2)(c) [*Findings Regarding Suggestions for Modifying the Proposed Modifications, Variations on the Alternatives, and a Suggested MPWSP Alternative*] on p. 14:

Other comments expressed the opinion that the proposed CalAm Conveyance Facilities and Extractions Wells appear to address deficiencies in the MPWSP EIR and are not needed for the Proposed Modifications to the PWM/GWR Project. The Board has determined that a 24" inch pipeline and 2 of the 4 proposed Extraction Wells are needed for CalAm to extract and deliver water from the Proposed Modifications on a seasonal basis, while at the same time implementing the ongoing Aquifer Storage and Recovery (ASR) program and meeting maximum day demands during the summer months. The SEIR assumed the Project would be built as proposed in evaluating alternatives and mitigation for Cal-Am's proposed Conveyance Facilities and Extractions Wells. The Board expresses no opinion on whether CEQA review would be required to address alternatives or additional mitigation measures for the proposed CalAm Conveyance Facilities and Extractions Wells should Cal-Am not enter into a Water Purchase Agreement for PWM Expansion deliveries.

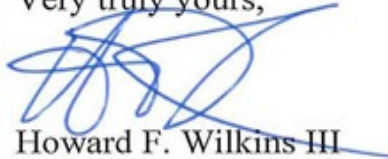
MCWD requests M1W modify "Draft Reso. 2021-XX Conditional Approval PWM Expansion" consistent with these proposed changes.

* * *

MCWD Comments on 2021 Final SEIR and PWM Expansion Project (SCH No. 2013051094)
April 22, 2021
Page 7

MCWD hopes these comments assist M1W in evaluating the Final SEIR and the proposed resolutions compliance with CEQA. MCWD stands ready and is looking forward to working with M1W and the MPWMD in advancing regional goals through implementation of the PWM Expansion Project. Should you have any questions about these comments, please contact me or MCWD General Manager Remleh Scherzinger.

Very truly yours,



Howard F. Wilkins III

cc: Paul Sciuto
Remleh Scherzinger

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April 23, 2021

VIA EMAIL & FEDEX

Board of Directors
Chayito Ibarra, Clerk of the Board
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Re: **April 26, 2021, Board of Directors Meeting, Agenda Item #7.B.,
Proposed Modifications to the Pure Water Monterey Groundwater Replenishment
Project, Final Supplemental Environmental Impact Report ("SEIR")**

Dear Honorable Board of Directors:

On behalf of California-American Water Company ("Cal-Am"), we submit this letter in response to Agenda Item #7.B. for Monterey One Water's ("M1W") April 26, 2021, Board of Directors Meeting, concerning the Final SEIR for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project ("Expansion") and in response to M1W staff's responses to our comment letter on the Final SEIR dated April 24, 2020.

As you know, Cal-Am is currently in the permitting process for the Monterey Peninsula Water Supply Project ("MPWSP") in order to provide a safe, reliable, and drought-proof alternate water supply to Cal-Am's customers on the Monterey Peninsula in response to the State Water Resources Control Board's Cease and Desist Order ("CDO"). Because this Board consistently has described the Expansion as a "back-up" to the MPWSP, Cal-Am has monitored the Expansion closely for its potential implications to the water supply issues affecting the Monterey Peninsula.

As expressed in Cal-Am's prior comments on the SEIR, Cal-Am continues to have concerns about the SEIR's adequacy and the Expansion's overall feasibility. Significant uncertainties remain in the SEIR regarding the Expansion's source waters and ability to deliver the promised quantity of product water, especially during periods of drought. Should the Board vote to approve the Expansion and certify the SEIR, these concerns will have to be reflected in the terms of any potential Water Purchase Agreement between Cal-Am and M1W for Expansion product water.

For instance, as Cal-Am has made clear to M1W in the past, Cal-Am would require stringent performance guarantees to provide greater assurances to Cal-Am and its customers that

the recycled water would be produced as promised. Failure to do so would leave the community vulnerable to water shortages, potential rationing, and further moratoriums on new service connections. In the absence of a permanent water supply for the community from desalination, any Water Purchase Agreement for the Expansion would require M1W to guarantee the full production volume and provide adequate indemnification to Cal-Am against any risk, liability, or penalties in the event the Expansion ever falls short of its promised water deliveries.

Further, even if Expansion product water is part of Cal-Am's water supply portfolio, Cal-Am still will need additional water supplies to serve projected Monterey Peninsula demand. The Expansion provides neither an adequate nor a permanent water supply sufficient to meet the Monterey Peninsula's needs. Based on the predictions set forth in the SEIR – which Cal-Am has never endorsed – the Expansion possibly could meet Monterey Peninsula demand for a maximum of only three years, after which the Monterey Peninsula would be without excess water supply to accommodate regional housing growth and other demands.

In addition, Cal-Am is concerned because the recent revisions to the Final SEIR that the Board is now considering fail to resolve significant errors and omissions identified in our prior comments. Attachment A to this letter responds to M1W staff's responses to our April 24, 2020, comment letter on the SEIR, and we have briefly summarized the SEIR's most serious flaws below.

- **Alternative to MPWSP:** The SEIR still fails to evaluate the Expansion as an alternative to the MPWSP. Because some – including M1W Board members – have stated that the Expansion could be considered a replacement for the MPWSP, the SEIR must evaluate the Expansion as an alternative water supply project to the MPWSP. (See CEQA Guidelines, § 15126.6.)
- **Cumulative Impacts:** The SEIR also still fails to evaluate the Expansion as a cumulative project. As part of its proceedings on the MPWSP, the CPUC requested that the Expansion be analyzed as an addition or supplement to the MPWSP. This cumulative impacts analysis still has not been conducted. Instead, the SEIR maintains the unreasonable position that if both projects are built, the Expansion would be turned off such that the projects would not operate at the same time.
- **Supply and Demand:** The SEIR's supply and demand analysis remains inadequate. The SEIR relies on a memorandum prepared by Dave Stoldt, General Manager of the Monterey Peninsula Water Management District. Mr. Stoldt is not a licensed engineer and his projections do not amount to expert evidence upon which M1W is entitled to rely under CEQA. More specifically, M1W should not rely on Mr. Stoldt's opinion because of his biased interest in the Expansion's success (see *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 173 ["even expert opinion may ultimately be rejected because of the expert's interest in the matter"]) and because his opinion is clearly outside his area of expertise (see *Cathay Mortuary v. San Francisco Planning Com.* (1989) 207 Cal.App.3d 275, 280-81 [reports by urban planning experts not dispositive on cultural

impacts]). Moreover, many of assumptions made by Mr. Stoldt are clearly faulty. For instance, despite evidence of reduced source water flows and present drought conditions, Mr. Stoldt unreasonably assumes that Aquifer Storage and Recovery (“ASR”) is and will be fully available as a permanent Monterey Peninsula water supply at 1,300 afy, even during a multi-year drought. In contrast, expert analysis submitted by Hazen & Sawyer of the source waters purportedly available to the Expansion demonstrates that even under the most conservative estimates, those source waters cannot realistically supply enough actual water for both the already approved Pure Water Monterey Groundwater Replenishment Project (“PWM/GWR Project”) and the Expansion to achieve their planned outputs. Hazen & Sawyer demonstrates that when the actual availability of source flows are accounted for, along with the variability of ASR water, the Expansion will not have sufficient source water to meet even Mr. Stoldt’s lowest demand estimates for the Monterey Peninsula. Further expert evidence provided through Attachment A demonstrates that the Expansion will not provide sufficient water to meet Peninsula demand.

- **Source Waters:** The SEIR fails to respond meaningfully to Cal-Am’s comments regarding insufficient source waters to operate the Expansion and the PWM/GWR Project. Comprehensive analyses of the source water purportedly available to the Expansion demonstrates that even under the most conservative estimates of demand for the Peninsula, the Expansion cannot realistically supply enough actual water for both the PWM/GWR Project and the Expansion to achieve their planned outputs. Even if full production of the PWM/GWR Project and the Expansion is assumed, expert analysis from Hazen & Sawyer demonstrates that, without the MPWSP, there is still insufficient supply to meet Mr. Stoldt’s lowest demand estimates. Moreover, recent revisions to the Project Description in the Final SEIR regarding updated water demand estimates prepared by Mr. Stoldt do not solve the Final SEIR’s deficiencies. The expert analysis in Attachment A actually relies on a slightly lower demand estimate than used in the Final SEIR and is therefore unaffected by these revisions. Finally, the Expansion’s inability to meet the demand on the Monterey Peninsula is even more severe when an additional 1,000 af of long-term demand is included, as may be required for the Seaside Groundwater Basin to achieve protective levels to prevent seawater intrusion.

Given Cal-Am’s commitment and responsibility to secure safe, reliable and drought-proof water for its customers and comply with the CDO, Cal-Am remains concerned with the substantial number of meaningful, unanswered questions and the considerable evidence demonstrating the Expansion is not a feasible alternative to the MPWSP. Accordingly, for the reasons summarized above and detailed in the attachment to this letter, if the Board certifies the SEIR and approves the Expansion, any potential Water Purchase Agreement between Cal-Am and M1W for the Expansion will need to account for these uncertainties.

LATHAM & WATKINS LLP

Very truly yours,



Duncan Joseph Moore
of LATHAM & WATKINS LLP

Attachments

cc: Rich Svindland, California-American Water Company
Ian Crooks, California-American Water Company
Kathryn Horning, Esq., California-American Water Company
Tony Lombardo, Esq., Lombardo & Associates

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	Cover Letter		
1	On behalf of California-American Water Company ("Cal-Am"), we submit this letter in response to Agenda Item #7-C for Monterey One Water's ("M1W") April 27, 2020, Board of Directors Meeting, concerning the Final SEIR for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project ("Expansion"). As you know, Cal-Am is currently in the permitting process for the Monterey Peninsula Water Supply Project ("MPWSP") in order to provide a safe, reliable, and drought-proof alternate water supply to Cal-Am's customers on the Monterey Peninsula in response to the State Water Resources Control Board's Cease and Desist Order ("CDO"). Because this Board consistently has described the Expansion as a "back-up" to the MPWSP, Cal-Am has monitored the Expansion closely for its potential implications to the water supply issues affecting the Peninsula. As expressed in Cal-Am's comments on the Draft SEIR, Cal-Am has serious concerns about the SEIR's adequacy and the Expansion's overall feasibility. Cal-Am believes that its concerns have not been addressed in the Final SEIR, and that both the SEIR and the Expansion remain fundamentally flawed. Therefore, and for the reasons provided below, Cal-Am is requesting that this Board vote to deny the Expansion and decline to certify the SEIR.	See specific responses below; comment referred to decisionmakers for their consideration.	As described in Cal-Am's cover letter to this Attachment and in the specific responses below, Cal-Am remains concerned with the adequacy of the SEIR and the Expansion's feasibility.
2	Cal-Am submitted a detailed comment letter on the Draft SEIR on January 30, 2020, which provided 280 pages of evidence demonstrating material inadequacies in M1W's California Environmental Quality Act ("CEQA") analyses. The Final SEIR, released on April 13, 2020, failed to resolve these substantial issues, as set forth in further detail in Attachment A hereto. We have briefly summarized the Final SEIR's most serious flaws below.	See specific responses below.	See specific responses below.
3	First, the Final SEIR entirely fails to evaluate the Expansion either as an alternative to or cumulative project with the MPWSP. If the Expansion is to be considered a replacement for the MPWSP—which has been suggested by certain regulatory agencies, including the California Coastal Commission—then the SEIR must evaluate the Expansion as an alternative water supply project to the MPWSP. (See CEQA Guidelines, § 15126.6.) The Final SEIR does not undertake this critical analysis. Further, as part of its proceedings on the MPWSP (of which M1W was a party), the California Public Utilities Commission ("CPUC") requested that the Expansion be analyzed as an addition or supplement to the MPWSP. This cumulative projects analysis still	The MPWSP is addressed as a cumulative project, however, the SEIR assumes that the Proposed Modifications would not operate if the MPWSP desalination project were operating pursuant to M1W Board Resolution 2019-19. Two projects would not need to operate at the same time to satisfy the same water supply demand. The MPWSP is not an alternative to the Proposed Modifications because it is not a feasible option to meet the project objectives and it does not reduce significant environmental	As explained in Cal-Am Response #10 below, Cal-Am remains concerned with the SEIR's failure to evaluate the Expansion as an alternative to or a cumulative project with the proposed MPWSP. Contrary to M1W's claim, it is reasonably foreseeable that both projects would operate at the same time if both projects are approved.

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	has not been conducted. Instead, the Final SEIR takes the unreasonable position that if both projects are built, the Expansion would be turned off such that the projects would not operate at the same time. Such a position flies in the face of CEQA's obligation that reasonably foreseeable environmental impacts must be analyzed and disclosed. (CEQA Guidelines, § 15126; Laurel Heights Improvement Assn. v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376, 396.).	impacts as presented in Final SEIR Chapter 3, Master Response #5 (hereafter referred to as "MR#5")	
4	Second, the Final SEIR still fails to evaluate fully the Expansion's potential impacts to biological resources, geology, hazards, hydrology and groundwater, land use planning and agricultural resources, noise and vibration, population and housing, water supply, and cumulative impacts. The Final SEIR also continues to improperly defer mitigation for energy impacts, and fails to support its air quality impact conclusions with substantial evidence.	See specific responses to each of the comments below for the topics listed.	The SEIR still fails to evaluate fully the Expansion's potential impacts to various environmental impact areas. See Cal-Am Responses #24-48 below.
5	Third, the Final SEIR fails to meaningfully respond to Cal-Am's comments regarding insufficient source waters to operate the Expansion and the already approved Pure Water Monterey Groundwater Replenishment Project ("PWM/GWR Project"). Cal-Am provided M1W with expert analysis prepared by Dudek (Exhibit A to Cal-Am's January 30, 2020, comment letter) that addresses the Draft SEIR's failure to document the quantity and reliability of the source waters purportedly available to serve the Expansion. Cal-Am also requested that M1W specifically identify the quantity of water expected to be obtained from each water source or where such information can be found. Rather than address Cal-Am concerns on individual source waters or provide the public with clarity as to specific quantities of source waters that are available, the Final SEIR frustrates public review by wholly altering the water supply estimates provided with the Draft SEIR.	The Final SEIR provides a good faith, reasoned response to comments about wastewater and new source waters. The public has been provided the technical analysis that supports the SEIR's conclusions in the Draft SEIR and in the Final SEIR those analyses are clarified and amplified; namely that under all potential future hydrologic and ARWRA conditions, there would be sufficient M1W rights to municipal wastewater and new source waters to meet the yield for the approved PWM/GWR Project and the Proposed Modifications. If the M1W Board chooses not to use its rights to municipal wastewater for the Proposed Modifications, the Board may use those water rights for other future recycled water demand.	As discussed in Cal-Am Response #43 below, Hazen & Sawyer's comprehensive analysis of the source water purportedly available to the Expansion demonstrates that even under the most conservative estimates, the source waters cannot realistically supply enough actual water for both the PWM/GWR Project and the Expansion to achieve their planned outputs. The public and decisionmakers have not been informed of this deficiency, and the potential environmental impacts that this shortage may cause have not been considered in the Final SEIR.
6	Specifically, the new Source Water Operation Plan Technical Memorandum attached as Appendix M to the Final SEIR dramatically increased the quantity of secondary effluent source water from what was considered in the Draft SEIR. As a result, the Final SEIR claims that many of the individual water sources evaluated in the Draft SEIR are no longer required for the Expansion to operate. The Final SEIR and Appendix M do not explain how the vast quantity of secondary effluent suddenly became available or why such sources	It is true that under the scenarios presented in Appendix M, the analysis shows that M1W would use more of its rights to municipal wastewater flows than it had assumed would be needed in Appendix I. The analysis was conducted to show that even if new source waters were available only to the approved PWM/GWR Project and not for meeting increased	The Final SEIR, and Appendix M specifically, fail to address the unreliability of the Expansion's water sources or the potential environmental impacts that may result from failing to meet demand on the Peninsula. Notably, the Final SEIR and Appendix M assume that no new source waters would be used for the Expansion, and, therefore, provide no analysis of a new source water agreement. (Final SEIR Appendix M, p. 9.) As explained

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	were not considered previously. By including last minute information about new water rights and sources purportedly available for the Expansion, M1W has rendered the Draft SEIR inadequate and deprived the public of meaningful review and comment. Recirculation is now required. (CEQA Guidelines § 15088.5; <i>Save Our Peninsula Comm. v Monterey County Bd. of Supervisors</i> (2001) 87 Cal.App.4th 99, 131.)	demands of the expanded PWM/GWR Project, there would still be waters available to use at the M1W Board's discretion. If the M1W Board chooses to not use the agency's rights to wastewater or new source waters until one or more future undefined projects are implemented, then the excess secondary effluent that would have been used for the Proposed Modifications will continue to flow as secondary effluent to the Monterey Bay. Currently, approximately 9,000 - 10,000 AFY flows as secondary effluent to the Monterey Bay, and the Proposed Modifications would reduce the amount of discharge to the Bay by approximately 1,300 to 1,800 AFY compared to the existing conditions plus approved PWM/GWR Project. The amount of discharge reduction would depend upon water year type and MCWRA and MCWD use of their secondary effluent rights. In addition, M1W would not necessarily need to divert, treat, and recycle new source water, such as impaired surface waters in the Blanco Drain and Reclamation Ditch, in which case those flows would also continue to be discharged to surface waters including indirectly to the Monterey Bay. This new information clarifies, amplifies, and adds to the environmental analysis, but does not result in depriving the public of meaningful review and comment. No new significant impacts and no worsening of previously identified significant impacts resulted; no new mitigation nor alternatives were presented that would be feasible, but which M1W declines to implement.	<p>in Cal-Am Responses #44, M1W's reliance on the Amended and Restated Water Recycling Agreement between M1W and the Monterey County Water Resources Agency for Expansion source waters is misplaced.</p> <p>In failing to consider source water uncertainty, M1W has precluded meaningful public review and comment. (<i>Save Our Peninsula Comm., supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].) See Cal-Am Responses # 43, 44, 45 and 46 below.</p>
7	Further, Appendix M acknowledges that the Expansion would reduce the availability of recycled water for anticipated future demands of the Castroville Seawater Intrusion Project ("CSIP"). However, no analysis was provided on the loss of these source waters to the CSIP or the effect on implementation of the Sustainability Goals of the Salinas Valley Basin Groundwater Sustainability Agency's ("SVBGSA") Groundwater Sustainability Plan	The PWM/GWR Project with the Proposed Modifications would still make available new source waters for use by the CSIP system increasing its	As explained in Cal-Am Responses # 19, 20, 36 and 44, as a result of the Expansion, there will not be an adequate water source to supply the CSIP system. As discussed in Cal-Am Response #43 below, the WWTP flows that the Expansion is projected to rely upon as source water are continuing to decline, and under most situations there would be insufficient source waters to

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am’s PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	<p>(“GSP”), adopted on January 9, 2020. The GSP’s Sustainability Goals include management of groundwater and other available water resources in the 180/400-Foot Aquifer Subbasin for long-term community, financial, and environmental benefits. To achieve this, the GSP contemplates expansion of recycled water use within the CSIP and other areas and efforts to prevent further seawater intrusion. The Expansion will frustrate the GSP’s goals by reducing recycled water available to the CSIP. By reducing deliveries to the CSIP, the Expansion will cause increased and continued pumping of groundwater and promote conditions that facilitate rather than retard seawater intrusion. The Final SEIR is inadequate because it does not include a consistency analysis of the Sustainability Goal of the GSP and for failing to evaluate and disclose reasonably foreseeable environmental impacts that could result from the reduction in recycled water deliveries. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)</p>	<p>overall yield by 2,858 AFY¹ or more, if the ARWRA conditions precedent in section 16.15 are met. The M1W Board maintains its ability to grant (through agreements or contract) its rights to municipal wastewater and new source water in the future to increase recycled water production for CSIP. The 180-/400-ft GSP goals can be met regardless of the implementation of the Proposed Modifications, since meeting those goals can occur by implementation of a number of water supply and groundwater management measures presented in the GSP most of which do not depend upon the excess winter effluent and M1W rights to wastewater assumed available for the Proposed Modifications. All projects to utilize more recycled water for irrigation require a new source of funding for infrastructure improvements to the SVRP and/or CSIP systems. The M1W Board will continue to have discretion about use of its rights to municipal wastewater and new source waters.</p>	<p>supply both the Expansion and the CSIP, the reduction of which may cause significant environmental impacts, such as additional seawater intrusion, which have not been analyzed.</p>
8	<p>Finally, the Final SEIR fails to support its conclusions about water supply and demand with substantial evidence. Unlike the CPUC’s supply and demand determinations, which were based on six years of review and voluminous evidence submitted under oath by multiple parties (including M1W), the Final SEIR only relies on estimates prepared by Dave Stoldt, General Manager of MPWMD. Mr. Stoldt bases his estimates on numerous inaccurate assumptions, and his most recent evaluation was added to the Final SEIR without any public review. (See Final SEIR, Appendix O [“Updated Stoldt Memo”]). Like his prior estimates attached to the Draft SEIR (the “Initial Stoldt Memo”), the Updated Stoldt Memo continues to ignore the growth projections provided by individual cities in Cal-Am’s service area, selectively choosing its own projections. Contrary to the Final SEIR’s conclusions and attempts to bolster Mr. Stoldt’s credibility, Mr. Stoldt’s estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation,</p>	<p>M1W has provided the information in Appendices N, O, and P and in the comment letter from Latham and Watkins (letter VV) on the Draft EIR. The Water Management District’s Supply and Demand report presents facts supporting its conclusions, and also presents the analysis of an expert in the field based on those facts. As such, the Water Management District’s report meets the CEQA definition of “substantial evidence.” The M1W Board of Directors can rely upon the Water Management District’s Supply and Demand Report, the information provided Letter VV, or a combination of the two.</p>	<p>As explained in Cal-Am Responses #17, 43, and 45 below, even when assuming full production from the PWM/GWR Project and the Expansion, Hazen & Sawyer’s analysis demonstrates that without the MPWSP there is still insufficient water supply to meet even MPWMD’s lowest demand estimates, when controlling for ASR conditions. Further, when the additional the additional 1,000 AFY required by the Seaside Groundwater Basin Watermaster to achieve protective levels to prevent seawater intrusion is taken into account, the Expansion’s shortfall is even more severe.</p> <p>Cal-Am also takes note of the recent analysis of the Expansion, prepared in April 2021. While the majority of the analysis focuses on recent information regarding the project’s injection</p>

¹ This number will vary depending upon future surface water and wastewater flows, CSIP and SVRP system improvements, CSIP demands, funding provided, and whether the conditions precedent in ARWRA 16.15 are met. Appendix I of the Draft SEIR presents the minimum new yield of 2,858 AFY based on the Schaaf & Wheeler flow balance methodology and assumptions. Appendix R of the Final SEIR presents other yield estimates based on M1W rights not used for the PWM AWPf being used for CSIP.

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am’s PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].)		<p>wells, M1W has made some changes in its discussion of Appendix O of the FSEIR, referencing “[r]evisions to the water demand analysis” that were “subsequently approved by the MPWMD on May 18, 2020 and again on February 25, 2021.” This latter revision refers to the May 18, 2020 Dave Stoldt memorandum that includes new information regarding the Association of Monterey Bay Area Governments’ most recent “Regional Growth Forecast.” It does not appear that Appendix O to the FSEIR has actually been revised to include this new information.</p> <p>In any case, the “Revised Low” water demand in MPWMD’s most recent memorandum—10,884 afy—is the same as the lowest demand estimate in Appendix O to the FSEIR. (See Appendix O, at p. 13.) As explained in Cal-Am Responses #17, 18, and 43, even when assuming a lower 10,855 afy figure, which was used in a September 2019 MPWMD memorandum, the Expansion <i>still</i> cannot meet demand when the project is controlled for source water variability. Accordingly, M1W’s reference to subsequent MPWMD memoranda does not correct the Final SEIR’s deficiencies.</p>
9	Given Cal-Am’s commitment and responsibility to secure safe, reliable and drought-proof water for its customers and comply with the CDO, Cal-Am cannot support a water supply project with such significant unanswered questions and considerable evidence demonstrating it is not feasible. Cal-Am is particularly concerned about the ability of the Expansion to provide an adequate and reliable water supply sufficient to satisfy the requirements for lifting the CDO. Accordingly, for the reasons summarized above and detailed in the attachment to this letter, Cal-Am respectfully requests that the Board deny the Expansion and decline to certify the Final SEIR.	The project would provide a new water supply that would increase the water available to Cal-Am customers during the time period when Cal-Am is required to reduce its diversions from the Carmel River. The CDO requires Cal-Am to reduce its unauthorized diversions and the Proposed Modifications would be able to do that in absence of an operational MPWSP desalination project. As discussed throughout the Final SEIR, the Proposed Modifications would operate in the event that the MPWSP desalination is not operating to deliver the water needed to meet the requirements of the CDO. According to the MPWMD, the Proposed Modifications would provide water to meet the CDO and provide for growth.	<p>Cal-Am is concerned with the Expansion’s ability to deliver sufficient water to meet the Peninsula’s water demands and lift the CDO. Even if Expansion product water is part of Cal-Am’s water supply portfolio, Cal-Am will still need additional water supplies because the Expansion is neither an adequate nor a permanent water supply sufficient to meet the Peninsula’s needs.</p> <p>See also Cal-Am Response #51 below.</p>
	Section I (Attachment A, starting at page A-1)		

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	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
10	<p>Cal-Am Comments VV-3, VV-4, and VV-110 to VV-115 identified the Draft SEIR’s failure to analyze the MPWSP as a cumulative project or an alternative. The Draft SEIR did not contemplate the cumulative impacts of both the Expansion and the MPWSP being implemented concurrently or in short succession. Further, given that the Expansion’s sponsors intend that it serve as an alternative to the MPWSP—and not as a true back-up to the MPWSP—the Draft SEIR should have analyzed the MPWSP as an alternative to the Expansion to achieve Peninsula water demands.</p>	<p>M1W Board Resolution 2019-19 stated “prior approval of proceeding with the initial environmental, permitting and design work for the potential expansion of the Pure Water Monterey Project was done specifically as a backup plan to, and not as an option in the place of, the Cal-Am desalination project.” The SEIR provides the public with information and analysis of the project as such and pursuant to CEQA. The Notice of Preparation presented it as such and no comments to change that assumption were provided during the public scoping period. The MPWSP desalination project is not a CEQA alternative to the Proposed Modifications because it does not meet the project objectives and would not reduce significant impacts of the Proposed Modifications. Regardless, the Final SEIR provides the requested alternatives analysis in MR#5 that compares the impacts of the Proposed Modifications with the impacts of the MPWSP desalination project. The cumulative analysis considers the MPWSP desalination and the Proposed Modifications being constructed simultaneously, but there would be no need to simultaneously operate both the Proposed Modifications and the MPWSP desalination project to deliver water for the same purpose or to meet the same demands. That would be akin to delivering 2 acre-feet of water when only 1 acre-foot is needed. Additional information in response to these issues is found in the Final SEIR, Chapter 3, Master Responses #4 and #5, (hereafter referred to as MR#4 and MR#5, respectively).</p>	<p>M1W staff continues to mischaracterize the Expansion and fails to analyze the cumulative impacts of operating the Expansion in conjunction with the MPWSP. M1W states that “there would be no need to simultaneously operate both the Proposed Modifications and the MPWSP”—this characterization leads to two potential outcomes: (1) that M1W intends the Expansion to operate as a standalone alternative to the MPWSP or (2) that M1W intends the Expansion to serve purely as a stopgap measure until Cal-Am begins water deliveries from the MPWSP. These two scenarios are either untenable or wholly unrealistic.</p> <p><i>First</i>, if M1W intends to implement the Expansion as a wholesale alternative to the MWSP, then Cal-Am remains concerned that the Expansion will be unable to provide a reliable water supply capable of lifting the CDO restrictions and meeting the demands of customers in the Cal-Am service area. See Cal-Am Responses #43-46.</p> <p><i>Second</i>, if the Expansion is truly intended to serve only as a stopgap measure until the MPWSP comes online, at which point M1W will shut down the Expansion (see, e.g., Final SEIR at p. 3-24), then it is entirely unclear why M1W and MPWMD are willing to expend such significant time and resources on a massive water project that will simply be retired in a number of years. Such a massive effort and expense—including the expenditure of significant taxpayer-funded government grants—on a project that M1W <i>intends</i> to shut down in short order is nonsensical.</p> <p>Neither of the above scenarios is realistic or in-line with Cal-Am’s mandate to provide a reliable, drought-proof water supply to the Peninsula. The more realistic, reasonably foreseeable scenario is that M1W would operate the Expansion at the same time the MPWSP is operated. This cumulative scenario wherein both the MPWSP and the Expansion are operate simultaneously must be analyzed in the SEIR, especially given the potential increased water supply that could induce growth. See Cal-Am Response #48 below.</p>

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

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11	Cal-Am Comments VV-3, VV-4, and VV-110 to VV-115 identified the Draft SEIR's failure to analyze the MPWSP as a cumulative project or an alternative. The Draft SEIR did not contemplate the cumulative impacts of both the Expansion and the MPWSP being implemented concurrently or in short succession. Further, given that the Expansion's sponsors intend that it serve as an alternative to the MPWSP—and not as a true back-up to the MPWSP—the Draft SEIR should have analyzed the MPWSP as an alternative to the Expansion to achieve Peninsula water demands.	The MPWSP is a cumulative project and is evaluated as such for construction impacts, but as discussed in MR#4 and the prior comment, it is not reasonable to assume that both the Proposed Modifications and the MPWSP desalination project would operate at the same time to deliver water for the same demands. To reiterate the information in MR#5 and the previous comment, the MPWSP desalination project is not a CEQA-required alternative to the Proposed Modifications, because the MPWSP is not a feasible option for M1W to meet the same project objectives while reducing significant impacts of the Proposed Modifications.	The SEIR must analyze a cumulative scenario in which both the Expansion and the MPWSP operate simultaneously. See Cal-Am Response #10 above.
12	First, it is reasonably foreseeable that the Expansion could be pursued as a water supply project alternative to the MPWSP. In its October 28, 2019, staff report on the MPWSP, the California Coastal Commission specifically identified that the Expansion could be pursued as an alternative to the MPWSP. As such, the SEIR must evaluate the Expansion as an alternative to the MPWSP - which it has failed to do. (See CEQA Guidelines, § 15126.6.)	The comment states that the CA Coastal Commission staff considers the Proposed Modifications to be an alternative to the MPWSP Desalination Project. M1W, as lead agency for this SEIR, is not required to consider the MPWSP Desalination Project as an alternative to its proposed project under CEQA. See above, M1W did not consider the MPWSP desalination project to be an alternative because it did not feasibly meet most of the objectives and would not reduce the significant environmental impacts of the Proposed Modifications evaluated in the CEQA document. Regardless, the Final SEIR does provide an analysis in MR#5 that compares the impacts of the two projects to be responsive to comments from Latham and Watkins in letter VV.	The SEIR must analyze scenario in which the Expansion is pursued as an alternative to the MPWSP. See Cal-Am Response #10 above.
13	Second, if the Expansion and MPWSP are not alternative water supply projects, then it is reasonably foreseeable that both could operate concurrently, in short succession, or collectively take place over the same period of time, and thus, are cumulative projects. (See CEQA Guidelines, §§ 15130, subd. (b)(1)(A), 15355, subd. (b).) The Final SEIR acknowledges the MPWSP as a cumulative project for purposes of construction-related cumulative impacts (Final SEIR, p. 3-23), but still fails to evaluate the operational-related cumulative impacts and claims that no such impacts would occur. (Id., p.	As discussed above, the cumulative analysis considers the MPWSP desalination and the possibility of the Proposed Modifications being constructed simultaneously, but there would be no need to simultaneously operate both the Proposed Modifications and the MPWSP desalination project together (i.e. simultaneously) to deliver water for the same purpose or to meet the same demands. For this	The SEIR must analyze a cumulative scenario in which both the Expansion and the MPWSP operate simultaneously. See Cal-Am Response #10 above.

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	3-22.) Further, the Final SEIR's position that the Expansion is not a cumulative project ignores the practical reality that it makes little sense to undertake the significant expense of moving forward with the Expansion if it would stop operating the moment the MPWSP begins running. Omitting an analysis of reasonably foreseeable impacts violates CEQA's basic requirements. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)	reason, operating the two projects together was not evaluated in the cumulative analysis. If there would be a condition in the future wherein the MPWSP desalination project as approved by the CPUC in its decision #18-09-017 (6.4 mgd to deliver 6,252 AFY to meet its Monterey District demands) and the Proposed Modifications to provide 2,250 AFY to the same urban water customers would both be necessary, an additional CEQA review would be required. The total water supply available to this area would be more than 17,000 AFY where actual demands for the service area have averaged 9,825 AFY for the past five years and 9,817 AFY for the past three years. Such a future scenario appears to be unlikely.	
14	In addition to violating CEQA's basic requirements, the Final SEIR's responses to Cal-Am's comments on these issues do not satisfy the requirements of CEQA Guidelines Section 15088, which require a good faith, reasoned response to the significant environmental points raised.	The public has been provided the technical work that supports the SEIR's conclusions; the analysis and information provided constitute a good faith, reasoned response to significant environmental points. See above for additional information about why responses provided a good faith reasoned response.	The Final SEIR does not provide good faith, reasoned responses to the significant issues raised here. (CEQA Guidelines, § 15088; see <i>People v. County of Kern</i> (1974) 39 Cal.App.3d 830, 840-842.) The Final SEIR asserts that the Project is not an alternative, but M1W staff's responses still refuse to engage in a cumulative impact analysis with the MPWSP. This ignores the reality that the two projects operating together is reasonably foreseeable: it makes little sense to expend significant resources on the Expansion if it would cease operating the moment the MPWSP begins running. The responses also seek to have it both ways: that the project is neither a cumulative project or alternative project to the MPWSP. This is not a reasoned analysis and therefore conflicts with the requirements of CEQA Guidelines Section 15088. (<i>Santa Clarita Org. for Planning v. County of L.A.</i> (2003) 106 Cal.App.4th 715, 723 ["It is not enough for the EIR simply to contain information submitted by the public and experts The requirement of a detailed analysis in response ensures that stubborn problems or serious criticism are not 'swept under the rug'"].)

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15	<p>II. Project Description</p> <p>Final SEIR fails to demonstrate that the Expansion is capable of meeting its own Project Objectives. (Responses to Comments VV-5, VV-8 to VV-8b.)</p>	<p>The SEIR shows that the Proposed Modifications would meet the project objectives if all components are implemented. The M1W Board has discretion to implement a project that would increase the yield of the PWM/GWR Project. The Proposed Modifications may be feasible if adequate funding is available to construct and operate them.</p>	<p>The SEIR provides that a primary objective of the Expansion Project is to “be capable of commencing operation, or of being substantially complete, by the end of 2021 or as necessary to meet Cal-Am’s replacement water needs.” (Draft SEIR, p. 2-9; see also Final SEIR, p. 3-35.) However, delays in the implementation of the original PWM/GWR Project call into question the ability of the Expansion Project to operate and deliver sufficient water without issue upon Expansion implementation. (See May 9, 2020, Letter from Cal-Am to M1W, attached as <u>Exhibit I</u>.)</p> <p>Cal-Am is also concerned by M1W’s suggestion that the Expansion may only be feasible if adequate funding is available. If M1W is uncertain about funding sources, M1W should consider an appropriate alternative water supply for the Peninsula.</p> <p>Further, Cal-Am is concerned that the Expansion will not be built and fully operational by the end of the 2021.</p>
16	<p>Cal-Am Comment VV-5 and VV-8b requested that the SEIR be revised to explain how delays in the completion and operation of the already approved Pure Water Monterey Groundwater Replenishment (“PWM/GWR”) Project may impact the Expansion’s ability to meet its Project Objectives. The Final SEIR dismissed Cal-Am’s concerns alleging that the ability of the Expansion to meet the stated Project Objectives is unrelated to any construction delays for the already approved PWM/GWR Project. Moreover, Master Response to Comment #6 admits that it is “unlikely” that the Expansion can be completed by December 31, 2021, the date by which Cal-Am must achieve the Cease and Desist Order’s diversion limitations applicable to the Carmel River. Master Response to Comment #6 further admits “that is currently not possible to estimate when the [Expansion] will be completed.” Given this uncertainty, it is doubtful that the Expansion is capable of meeting its stated objective of “commencing operation, or being substantially complete, by the end or 2021 or as necessary to meet Cal-Am’s replacement water needs.” If the Expansion is unable to meet stated Project Objectives, M1W should find that the project is infeasible and select an appropriate alternative.</p>	<p>This comment suggests that a new water supply project would need to be operating to deliver water to the Cal-Am Monterey District no later than December 31, 2021 to meet the Cease and Desist Order requirements. It appears that this comment is stating that if a project, such as the Proposed Modifications, does <u>not</u> operate by December 31, 2021, then Cal-Am would <u>not</u> meet its requirements to comply with the Cease and Desist diversion limitations applicable to the Carmel River. At this time, the SEIR assumes that the Proposed Modifications could be completed “as necessary to meet Cal-Am’s replacement water needs” for the Carmel River if M1W chooses to implement the Proposed Modifications. M1W can only precede to implement in a timely manner if funding is available and thus, may not have the means to implement the Proposed Modifications without MPWMD or CalAm funding.</p>	<p>The Expansion will not be fully operational until after the end of 2021, and may be further delayed depending on M1W’s ability to secure funding. By that time, Cal-Am will have increasingly limited supplies available to meet current and future demand.</p>

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17	<p>Cal-Am Comments VV-8 to VV-8b explained that the CPUC determined that Cal-Am’s replacement water needs were 14,000 AFY, and requested that the Draft SEIR be revised to address the CPUC’s evaluation of supply and demand. The Final SEIR asserts that because the CPUC did not prepare its own water supply and demand evaluation, the CPUC’s demand determination of 14,000 AFY has no bearing. (See D.18-09-017, p. 171.) The Final SEIR ignores that the CPUC made its 14,000 AFY determination based on evidence presented from multiple parties - including M1W - and that M1W does not have authority to divest the CPUC of its exclusive jurisdiction over public utilities and declare a new demand requirement. (See Pub. Util. Code, § 761, 1001.) Rather than addressing these issues, the Final SEIR defers to David Stoldt’s supply and demand analysis in Appendix O of the Final SEIR - which is an analysis that M1W itself did not prepare. Contrary to the Final SEIR’s conclusions, the unvetted and unsubstantiated estimates from Mr. Stoldt do not constitute substantial evidence in support of the SEIR’s conclusions. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].) Appendix O cannot constitute substantial evidence upon which the SEIR may rely.</p>	<p>M1W, as the CEQA lead agency for the SEIR, has the ability to rely upon substantial evidence as defined by CEQA to analyze a proposed project’s environmental impacts. In this case, M1W is not proscribing use of any demand estimate for the CPUC, Cal-Am, or local governments, M1W does not have purview for these decisions. MPWMD as project partner is responsible for water planning for the Monterey Peninsula (Monterey District main system). M1W therefore, uses its project partners’ analysis as the most recent, accurate, and relevant information available about water supply and demand to support the analysis of growth inducement and associated environmental impacts. This conservative assumption ensured that the amount of growth enabled by the proposed modifications is not underestimated, impacts are conservatively assumed to occur due to new growth enabled by increased adequate water supply for growth, and these recent data and facts that undeniably constitute substantial evidence upon which the SEIR may rely. It appears that there is a difference of opinion; however, differences of opinion do not render an EIR to be inadequate.</p>	<p>M1W continues to disregard the fact that the CPUC found credible and persuasive the demand analyses presented by Cal-Am (14,355 afy), the Monterey Peninsula Regional Water Authority (14,000 afy), and the Coalition of Peninsula Businesses (15,000 afy), and concluded that an estimated demand projection of 14,000 afy was reasonable and supported by statutory and regulatory requirements. (CPUC D.18-09-017, pp. 68, 195.)</p> <p>In addition, when assessing demand, the Final SEIR fails to account for an additional 1,000 AFY that the Seaside Groundwater Basin Watermaster also has concluded is required to achieve protective water levels and prevent seawater intrusion over the next 25 years. (Exhibit C [“Excerpts of Cal-Am’s Response to CCC Staff”], pp. 50-51; Exhibit F [“August 12, 2020 Seaside Groundwater Basin Watermaster Letter to Commission”], p. 2.) Moreover, the need for this additional 1,000 AFY demand is not merely speculative. In November 2020, the Seaside Groundwater Basin 2020 Seawater Intrusion Analysis Report, attached hereto as Exhibit G, identified for the first time “what may be a precursor to seawater intrusion” in two monitoring wells—monitoring well FO-10 Shallow, north of and outside of the Seaside Basin, and monitoring well FO-9 Shallow, just inside the northern boundary of the Seaside Basin in the Northern Coastal Subarea. (Ex. G, p. 1.)</p> <p>Likewise, a December 2, 2020 memo from the Seaside Groundwater Basin Watermaster Technical Program Manager to the Board of Directors stated “neither the desalination plant nor the expanded PWM project, in conjunction with the already-in-operation initial PWM project . . . will enable groundwater levels to reach protective elevations. It is clear that in order to protect the Basin against the threat of seawater intrusion it will be necessary to <i>obtain additional recharge water that can be left in the Basin</i> and not pumped out, in order to achieve protective groundwater elevations. Previous groundwater modeling indicated that on the <i>order of 1,000 AFY of recharge water, injected into and left in the Basin over a 25-year period</i>, might be necessary to achieve protective elevations.” (Exhibit H [“Seaside Groundwater Basin Watermaster Memo”], p. 1 [emphasis added].) The additional</p>

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			<p>demand needed to prevent seawater intrusion and the potential for seawater intrusion if this demand is unmet, should be evaluated in the SEIR.</p> <p>M1W ignores the prior conclusion from the CPUC and additional information from the Seaside Groundwater Basin Watermaster. Instead, M1W relies on MPWMD’s analysis of water supply and demand on the Monterey Peninsula, which it describes as “as the most recent, accurate, and relevant information available about water supply and demand.” This is far from the truth. As discussed below in response to Cal-Am Response 43, and as explained in the materials Cal-Am submitted to the California Coastal Commission (“CCC”) (see Exhibits A, B, C, and D), Appendix O, which was drafted in March 2020, does not take into consideration post-2013 wastewater or “WWTP” flow data that was disclosed as late as fall 2020. Current WWTP flow should be disclosed to the public and fully evaluated in the SEIR</p> <p>In any case, even when assuming the lowest demand estimates that MPWMD has provided—10,855 afy—analysis of actual source water data in Hazen & Sawyer’s September 10, 2020 Memo, which controls for multiple Aquifer Storage and Recovery (“ASR”) and surface water scenarios, demonstrates that the Expansion cannot meet even this deflated 10,855 afy demand estimate. (Ex. A, Exhibit 3 [“September 10, 2020 Hazen & Sawyer Memo”], p. 13.)</p> <p>M1W is correct that “mere argument, speculation, and unsubstantiated opinion, even expert opinion, is not substantial evidence” under CEQA. (<i>Pocket Protectors v. City of Sacramento</i> (2004) 124 Cal. App. 4th 903, 928 [citing Pub. Res. Code § 21082.2(c); CEQA Guidelines, § 15384(a)].) Although, an EIR’s failure to reflect disagreement among the experts does not per se constitute a prejudicial abuse of discretion, a “prejudicial abuse of discretion occurs if <i>the failure to include relevant information precludes informed decisionmaking and informed public participation</i>, thereby thwarting the statutory goals of the EIR process.” (<i>Kings County Farm Bureau v. City of Hanford</i> (1990) 221 Cal. App. 3d 692, 712. [emphasis added].)</p>

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			Here, the conclusions in Hazen & Sawyer's analysis are far from unsubstantiated—rather, the analysis is based on M1W's own, recently released data. By not considering M1W's own more recent information and the analysis from Hazen & Sawyer, M1W is "thwarting the statutory goals of the EIR process." (<i>Kings County Farm Bureau</i> , 221 Cal.App.3d at 712.)
18	<p>Cal-Am Comments VV-7 to VV-7g explained that the SEIR cannot rely on the estimates of a single person—Mr. Stoldt—to support its conclusions regarding the feasibility of the Expansion. Cal-Am identified the significant flaws underlying Mr. Stoldt's assumptions, and noted that the SEIR should instead rely on the CPUC's determinations, which were based on evidence submitted under oath by multiple parties. In particular, Cal-Am identified that Mr. Stoldt selectively utilized growth projections intended to achieve his desired water demand estimates, ignoring the higher growth and future water supply projections from individual cities in Cal-Am's Monterey District service area.</p> <p>The Final SEIR fails to provide substantial evidence supporting its water supply and demand conclusions. Instead, the Final SEIR refers to Master Response #3, a revised version of Mr. Stoldt estimates at Appendix O—which was not available to the public during the comment period—and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous material flaws that Cal-Am (and others) identified in Mr. Stoldt's prior estimates, dismissing these flaws as "differences of opinion." Contrary to the Final SEIR's conclusions, the unvetted and unsubstantiated estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR's conclusions. (CEQA Guidelines, § 15384, subd. (a) ["Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence."].)</p>	M1W staff considers the information presented in Appendices N, O, and P as meeting the CEQA definition of "substantial evidence." M1W staff has not received alternative or corrected information that disputes the information in these Appendices; if such inaccuracies exist, M1W staff would be more than happy to include it in the record. The existence of alternative data or facts, however, would not render the SEIR to be inadequate. These comments do not suggest new mitigation or alternatives that would substantially lessen any of the significant environmental impacts. For these reasons, the growth inducement analysis in the Draft SEIR remains fully compliant with CEQA regardless of the differences of opinion related to the substantial evidence presented in the SEIR.	<p>As described below in Cal-Am Response #43 below, the Final SEIR, including Appendix O, does not include post-2013 WWTP flow information, which demonstrates a significant reduction in availability of source water for the Expansion. Analysis from Hazen & Sawyer indicates that when these reduced flows are taken into account, along with the variability of ASR water, the Expansion will not have sufficient source water to meet even the lowest demand estimates for the Monterey Peninsula.</p> <p>Contrary to M1W's claim, the existence of this "alternative data or facts" <i>does</i> render the Final SEIR inadequate. This new data constitutes significant new information under CEQA because M1W must identify and analyze available water sources for the Expansion in order to demonstrate whether that project is feasible or whether potential environmental impacts could result. Regardless of where this new water is sourced, its diversion to the Expansion could generate a significant new impact, which has yet to be evaluated. (CEQA Guidelines, § 15088.5 [requiring recirculation of an EIR where significant new information arises].)</p>
19	Cal-Am Comment VV-9 explained that the Draft SEIR failed to evaluate potential impacts to agricultural water supplies due to a significant reduction (16%) in available agricultural irrigation water as a result of the Expansion. Specifically, Cal-Am Comment VV-9 pointed out that the Draft SEIR explains that, under the Expansion, there would be 700 to 800 afy less water available for agricultural irrigation than under the previously approved PWM/GWR Project. (Draft SEIR, pp. 2-11 to 2-12.) Comment VV-9 was based on analysis by Dudek in a memorandum attached to Cal-Am's comments (see Dudek	The public has been provided the technical work that supports the SEIR's conclusions; the analysis that shows that the PWM/GWR Project will continue to be capable of increasing water available to CSIP for irrigation. The conditions precedent in ARWRA section 16.15 have not been completed to date such that the new source waters could serve as a source of augmentation of MCWRA rights to wastewater.	As discussed in Cal-Am Response #43 below, the WWTP flows that the Expansion is projected to rely upon as source water are continuing to decline, and under most situations there would be insufficient source waters to supply both the Expansion and the CSIP, the reduction of which may cause significant environmental impacts, such as additional seawater intrusion, which have not

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	Comments VV-148 to 149), which found that the Draft SEIR “makes no attempt to assess the proposed changes in agricultural water deliveries, and instead defaults to a ‘no project’ baseline to draw conclusions on the significance of impacts.”	M1W currently possesses rights to use new source waters that it has implemented in partnership with the City of Salinas, MPWMD, and MCWRA. M1W also possesses rights to municipal wastewater under California Water Code Section 1210, that provides M1W the ability to give those rights to other entities through contract. The ARWRA with MCWRA and prior agreements with Marina Coast Water District grant rights to municipal wastewater to those entities, and these agreements are described in detail in the Draft SEIR and reiterated in the Final SEIR (Chapter 3, Master Response #3, hereafter MR#3). The Draft SEIR and the Final SEIR present multiple potential future scenarios and assumptions to quantify potential changes in agricultural water deliveries.	been analyzed (Ex. A, Exhibit 1 [“August 11, 2020 Hazen and Sawyer Memo”], pp. 13-14.) Specifically, Updated Figure 4 in the August 23 Hazen & Sawyer Memo shows that when current WWTP and Reclamation Ditch flows are accounted for, demand for source waters identified for the Expansion far exceeds available supplies in Normal/Wet years and in Dry Years. (Ex. A, Exhibit 2 [“August 23, 2020 Hazen Memo”], p. 6.) Without an adequate source water supply, M1W will have to choose between supplying source water for the Expansion or for the CSIP system. (Ex. A, Exhibit 2, pp. 13-14.) Without sufficient source water to supply CSIP, seawater intrusion in the Salinas Valley Groundwater Basin will continue to progress, disproportionately affecting the residents of the disadvantaged community of Castroville.
20	Final SEIR Responses to Comments VV-9 and VV-148 to VV-149 fail to respond to this specific comment or the analysis provided by Dudek, and instead refer to the 16-page Master Response #3. While Master Response #3 addresses the availability of agricultural wash water, Master Response #3 fails to address the environmental impacts associated with reduced availability of agricultural irrigation water under the Expansion, beyond acknowledging that the Expansion Project would reduce the future beneficial increases of recycled water for the CSIP. Therefore, the Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.	The public has been provided the technical work that supports the SEIR’s conclusions that there would not be a new significant impact nor a worsening of severity of a significant impact related to agricultural irrigation. CSIP yield discussion is included in MR#3 starting at page 3-17. The Proposed Modifications would not reduce the ability of SVRP and CSIP to use the MCWRA rights to wastewater flows, nor to participate in the New Source Waters project for the benefit of the CSIP system yield. The Proposed Modifications would not reduce agricultural irrigation water such that a significant environmental impact would occur; in fact, SVRP yield would increase provided M1W and MCWD continue to provide MCWRA portions of its rights to wastewater. See Appendix R of the Final SEIR that shows the increases possible in CSIP yield both with and without the Proposed Modifications. In all scenarios, CSIP yields would increase and M1W would continue to dedicate a large portion of their rights to MCWRA for CSIP.	Contrary to the response from M1W, the Final SEIR acknowledges that under Appendix M’s analysis, the Expansion will reduce the water available to CSIP by up to 800 AFY. (Final SEIR, p. 3-20 [“In sum, the Proposed Modifications would reduce the future beneficial increase in recycled water that would be available for the CSIP.”].) This is a meaningful admission, but the Final SEIR fails to assess the reasonably foreseeable land use impacts that would result. As discussed in Cal-Am Response 19 above, when updated wastewater flows are accounted for, which are declining, the Expansion will not be able to meet demand in even normal years and the Monterey Peninsula will be forced to supply source water to either the Expansion or for the CSIP system. The potential impacts of reduced supplies to the CSIP system have not been analyzed. The Final SEIR does not provide a good faith, reasoned response to Cal-Am’s comments on agricultural washwater, and therefore violates CEQA. (CEQA Guidelines, § 15088; see <i>People v. County of Kern</i> (1974) 39 Cal.App.3d 830, 840-842.) In addition, the Final SEIR’s failure to address and analyse the Expansion Project’s reduction of available CSIP water is a significant new impact that mandates recirculation. (CEQA Guidelines

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			§ 15088.5; <i>Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors</i> (2001) 87 Cal.App.4th 99, 131.)
21	Cal-Am Comment VV-10 explained that under the Expansion, less municipal wastewater would be discharged through the ocean outfall. (Draft SEIR, p. 2-11.) Accordingly, Cal-Am Comment VV-10 requested that the SEIR be updated to assess how reduction in wastewater discharge would affect operations of the MPWSP in a cumulative project scenario, particularly in the context of ocean water quality.	As discussed previously, this SEIR assumes that operation of the Proposed Modifications would <u>not</u> occur if the MPWSP is delivering water for the same purpose. Therefore, changes to the wastewater discharge associated with the Proposed Modifications would not occur nor affect the operation of the MPWSP. See MR#4. The Proposed Modifications would not operate to deliver water to the Monterey Peninsula to meet the same demands as would be supplied by the MPWSP desalination project.	<p>The Final SEIR continues to avoid a complete analysis of the Expansion's impacts on ocean water quality by relying on the false assumption that the Expansion is neither an alternative to nor a cumulative project with the MPWSP. As demonstrated below in Cal-Am Response 43, the Expansion is incapable of meeting the Monterey Peninsula's demands without operating in tandem with the MPWSP. See also Cal-Am Response #10 above.</p> <p>Accordingly, the Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088, and it fails to comply with CEQA's basic requirement that reasonably foreseeable impacts be analyzed. (CEQA Guidelines, § 15126, 15165; <i>Laurel Heights, supra</i>, 47 Cal.3d at 396.)</p>
22	Final SEIR Response to Comment VV-10 fails to provide any specific response to Cal-Am's concerns, and instead refers to Master Response #4 regarding the adequacy of the SEIR's cumulative impacts analysis. Master Response #4 asserts that the Expansion "is not expected" to operate concurrently with the MPWSP, and therefore need not be analyzed as a cumulative project. However, as discussed above, the Final SEIR also asserts that the Expansion is not an alternative to the MPWSP, ignoring the fact that other government agencies view the Expansion as a potential alternative water supply to the MPWSP. The Final SEIR therefore attempts to avoid a complete analysis of the Expansion's impacts on ocean water quality as a result of reduced wastewater discharge by arguing that the Expansion is neither an alternative to nor a cumulative project with the MPWSP. The Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088, and it fails to comply with CEQA's basic requirement that reasonably foreseeable impacts be analyzed. (CEQA Guidelines, § 15126, 15165; <i>Laurel Heights, supra</i> , 47 Cal.3d at 396.)	See responses above and Final SEIR MR #4 and MR#5	See Cal-Am Response #21 above.
23	Cal-Am Comment VV-11 and the Final SEIR's response relate to the Expansion's source water rights and the Draft SEIR's assumptions regarding certain conditions precedent in the Amended and Restated Water Recycling	See response below.	See Cal-Am Response #44 below.

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	Agreement ("ARWRA"). The Final SEIR's inadequate response to these comments are addressed below in Section III.M.		
24	<p>A. Air Quality and Greenhouse Gases (1st major bullet). Final SEIR's utilization of "spreadsheet analysis" and outdated emission estimates fails to adequately disclose the Expansion's air quality impacts to the public and decisionmakers. (Response to Comments VV-13 to VV-18.)</p> <p>Cal-Am Comments VV-13 to VV-18 reasonably requested that the SEIR be revised to utilize the widely accepted CalEEMod air emissions model, to utilize the most up-to-date mobile source emissions model (EMFAC2017), and to adequately disclose air emission calculations, including underlying assumptions, to the public and decisionmakers. Cal-Am requested these revisions because the SEIR contains an out-of-date and opaque air emission assessment that precludes the public from cross-checking the calculations and analysis, depriving the public of key information.</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions regarding air quality in Appendix F (Attachment 1); the analysis has been made available for the public to cross-check the calculations by replicating the spreadsheet or using CalEEMod. This comment does not provide specific information about which assumptions or methods the commenter considers to be incorrect. The effect of using the new EMFAC2017 mobile emissions factor model was addressed previously and found that use of the new model would not affect overall emissions because it only applies to the mobile portion of the construction emissions that were much less than emissions from construction equipment or fugitive dust emissions. The expertise of the air quality consultant, James Reyff of Illingworth & Rodkin, Inc. is provided in Appendix P; M1W was relied upon for this SEIR. There is no requirement to use CalEEMod by the state or by the local air district. The response is a good faith, reasoned response that meets the CEQA standard in Section 15088. Importantly, MBARD reviewed the analysis and had no comments regarding the approach; this was the same approach used for previous EIR. CalEEMod is a model used to compute emissions from land use projects and was not designed to accurately predict fugitive dust emissions from construction projects. The fugitive dust analysis is enhanced and more accurate than it would have been if CalEEMod was used.</p>	<p>An assertion that the public must attempt to replicate the SEIR's opaque spreadsheet approach and/or use CalEEMod (a sophisticated air emissions modelling tool that requires specialized education and training) to ascertain whether the Final SEIR properly calculated and disclosed air quality impacts is not an appropriate response by M1W Staff. The burden lies with the lead agency to adequately explain why standard emission calculation methodologies, notably recommended by MBARD, were not utilized. Here, M1W staff assert that the public must function as expert air quality consultants. The Final SEIR does not contain a reasonable, fact-based explanation of why it is infeasible to utilize CalEEMod and EMFAC2017 or why there is no need to include those calculations, in violation of CEQA Guidelines Section 15088(c).</p>
	<p>A. Air Quality and Greenhouse Gases (2nd major bullet). Cal-Am Comments VV-19 to VV-20 highlighted that the SEIR's air emissions calculations and assessment assumed a 6-foot trench width for pipelines despite the fact that some trenches would be up to 12-feet wide. Cal-Am</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions; the emissions calculations do not need to be revised to assume that all trenches would be 12-feet wide when that is not</p>	<p>M1W staff assert that construction of a 12-foot wide trench would have the same emissions as construction of a 6-foot wide trench because less trench would be constructed in a single day. This unsubstantiated assertion would hold true only if a condition of</p>

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	<p>reasonably requested that the SEIR be revised to assume a 12-foot trench width to properly calculate the Expansion’s worst-case daily emissions, which is necessary for an accurate (apples-to-apples) comparison against MBARD’s daily thresholds of significance. Despite admitting that a “12-foot wide trench could be constructed in some locations,” Final SEIR Responses to Comments VV-19 to VV-20 fail to assume a 12-foot trench width and refuse to properly calculate worst-case daily emissions. Instead, these responses attempt to defend the SEIR’s flawed air emission analysis by noting that the SEIR used an average trench width. This justification ignores that the pertinent MBARD thresholds are focused on the worst-case daily emissions from trenching activity, not emissions on an average day. The Final SEIR’s failure to perform the proper worst-case emissions comparison results in a withholding of information from the public necessary to evaluate and verify the Expansion’s actual environmental impact and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.</p>	<p>an accurate assumption. The Draft SEIR does not need to assume a 12-foot width of trench for all trenches if there would only be the need for 12-foot wide trench in discrete areas. Construction of the RUWAP product water pipeline required less than 6-foot wide trench width for the vast majority of the pipeline alignment. The Draft SEIR analysis already contains worst-case assumptions because those assumptions would not be worse if a 12-foot wide trench was assumed. Trenching activities are not the highest emitting activities in a single 24-hour period (drilling activities or grading would be more intensive).</p> <p>Assuming a 12-foot wide trench would not change the result as daily worst-case PM10 emissions (because they only account for approximately one pound per day with either trench width). One must keep in mind that the trenching emission calculations are based on width, depth and length. Wider trenches take longer to construct; therefore, the length of trench constructed in a single day is shorter.</p>	<p>approval were imposed limiting the daily maximum usage of trench construction equipment – there is no such condition in the Final SEIR. In addition, the M1W staff make another unsubstantiated assertion that trenching activities are irrelevant because they “are not the highest emitting activities in a single 24-hour period.” However, the Final SEIR does not include any calculations supporting this assertion. The Final SEIR does not contain a reasonable, fact-based explanation of why it is infeasible to calculate emissions from construction of 12-foot wide trenches or why there is no need to include those calculations, in violation of CEQA Guidelines Section 15088(c).</p>
25	<p>B. Biological Resources: Fisheries (1st major bullet). Final SEIR fails to assess impacts to fisheries associated with continued Carmel River withdrawals. (Responses to Comments VV-30 to VV-33.)</p> <p>Cal-Am Comments VV-30 to VV-33 requested that the SEIR address the impacts associated with a reasonably foreseeable scenario where Peninsula water demands exceed supply with the Expansion and without the MPWSP, resulting in the need for additional Carmel River withdrawals.</p> <p>Final SEIR Responses to Comments VV-30 to VV-33 fail to provide the requested analysis of impacts to fisheries from additional Carmel River withdrawals and claim that the Expansion would not cause unauthorized Carmel River withdrawals. The Final SEIR justifies this conclusion by continuing to rely on the improper water demand estimates prepared by</p>	<p>The public has been provided the technical work that supports the SEIR’s conclusions; the analysis shows that the Proposed Modifications would not result in increased Carmel River withdrawals. A new water supply to serve the same area as the Carmel River system aquifer, such as would be provided by the Proposed Modifications, would <i>reduce</i> Carmel River withdrawals. The Proposed Modifications would only result in a beneficial impact to fisheries.</p>	<p>The SEIR still inappropriately assumes that the Expansion will provide sufficient supply to allow Cal-Am to cease Carmel River diversions. The SEIR needs to address the reasonably foreseeable scenario in which water demands exceed supply, and additional Carmel River withdrawals would be necessary for regional health and safety.</p>

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	MPWMD staff, which are not supported by substantial evidence as discussed above.		
26	<p>B. Biological Resources: Fisheries (2nd major bullet). Final SEIR fails to assess impacts to fisheries associated with a reduction in irrigation water and increase in stormwater capture. (Response to Comment VV-34.) Cal-Am Comment VV-34 requested that the SEIR be revised to address how a reduction in irrigation water and increase in stormwater capture could affect fish habitat or populations (e.g. from runoff).</p> <p>Final SEIR Response to Comment VV-34 fails to provide the requested analysis, and instead states that the Expansion would not divert more source water than the analysis presented in the certified PWM/GWR Project Final EIR and that the diversion of stormwater and irrigation water is already entitled. Contrary to the Final SEIR Response to Comment VV-3, there are remaining questions regarding the source water for the Expansion and, as discussed further above in Section II regarding Response to Comment VV-9, the Final SEIR failed to analyze impacts associated with the Expansion's significant reduction in irrigation water supplies. The Final SEIR fails to support its conclusion that the Expansion would not divert more source water than evaluated in the PWM/GWR Project Final EIR. Accordingly, the SEIR fails to assess potentially significant impacts associated with a reduction in irrigation water and increase in stormwater capture, which could affect fish or habitat populations.</p>	<p>The public has been provided the technical work that supports the SEIR's conclusions. The Approved PWM/GWR EIR assumed all available/allowable new source water (including storm water) would be diverted and that the AWPf and/or SVRP would use it or it would be discharged after primary and secondary treatment. Any reduction in CSIP or MCWD irrigation water use (or supplied by M1W) would be due to other reasons (not the Proposed Modifications) and would not adversely affect surface water flows or fisheries habitat. If SVRP or MCWD irrigation demands are reduced, it would not result in a commensurate reduction in surface water flows for fish habitat within the Reclamation Ditch because those volumes are combined irrigation water and precipitation (runoff) flows from areas outside of CSIP and MCWD areas. In the Reclamation Ditch, urban runoff, agricultural runoff and natural runoff is from a separate watershed than these entities' irrigation areas. The requirements to maintain fish flows and volumes within downstream water bodies relate only to use of Blanco Drain and Reclamation Ditch and State water rights permits limit MCWRA and M1W diversions to protect fisheries according to the existing Settlement Agreements with each CA Dept. of Fish and Wildlife (CDFW) and the National Marine Fisheries Service (NMFS) and conditions in the associated Water Right permits. Either with or without the Proposed Modifications, those requirements will still be in effect to maintain fish habitat as required by CDFW and NMFS. M1W can use all available and allowable flows to meet recycling demands with or without the Proposed Modifications.</p>	<p>M1W staff's response, just as the Final SEIR response, remains conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised. Moreover, as discussed in Cal-Am Responses #43 and #44, newly released wastewater flow data and disputed water rights create result in a shortfall in source water for the Expansion, indicating that the Final SEIR's conclusion that the Expansion would not divert more source water than evaluated in the PWM/GWR Project Final EIR is even less convincing. Accordingly, there is a continuing failure to include an updated analysis to support that the Expansion would not adversely affect fish habitat or populations.</p>

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27	<p>C. Biological Resources: Terrestrial (1st major bullet). Final SEIR fails to provide necessary updates to Mitigation Measure ("MM") BT-1a. (Response to Comment VV-36.) Cal-Am Comment VV-36 requests that the SEIR be revised to clarify MM BT-1a to explain what type of coordination is required by MM BT-1a with the City of Seaside regarding the location of well facilities, as well as what sensitive biotic material is being removed. Final SEIR Response to Comment VV-36 fails to provide the necessary updates to MM BT-1a. Instead, the response generally refers to permit amendments that may be necessary and provides no information regarding the movement of well facilities or what sensitive biotic material might be removed. By improperly deferring these details until a future process with the City of Seaside, the SEIR withholds information from the public regarding the full scope of potential impacts. The Final SEIR response also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a reasoned response to the significant environmental points raised.</p>	<p>The response to this comment is a good faith reasoned response because the City requires these type of changes during coordination as part of their approval of a right of way, easements, property disposition, and the grading and ordinance ordinance permit disclosed on page 2-33 of the Draft SEIR. The City and all project proponents within the area of the injection wells are subject to the Habitat Management Plan requirements governing all development with the former Fort Ord areas of the City. The approved PWM/GWR EIR, the Draft Supplemental EIR and a multitude of readily available and referenced public documents provide all of the detail that this comment has requested. M1W together with their partner, MPWMD, have received these approvals for the Approved PWM/GWR Project and the changes requested did not trigger any changes that required recirculation of the Approved PWM/GWR EIR.</p>	<p>Cal-Am understands that M1W and MPWMD received these approvals for the PWM/GWR Project. However, M1W proposes new well facilities as part of the Expansion Project, and the SEIR is unclear what sensitive biotic material might be removed or where the new well facilities may be located. The SEIR must include that information now, instead of deferring the details until a future process with the City of Seaside. (See <i>Rialto Citizens for Responsible Growth v. City of Rialto</i> (2012) 208 Cal.App.4th 899, 944.) Otherwise, the SEIR fails as an informational document.</p>
28	<p>C. Biological Resources: Terrestrial (2nd major bullet). Final SEIR fails to provide necessary updates to MM BT-1d. (Response to Comment VV-37.) Cal-Am Comment VV-37 requests that the SEIR be revised to clarify MM BT-1d to provide for restoration of the California legless lizard habitat.</p> <p>Final SEIR Response to Comment VV-37 fails to provide for the restoration of the California legless lizard habitat, and instead states that the California Department of Fish and Wildlife could require restoration if deemed necessary. Because the Final SEIR failed to update MM BT-1d to provide for restoration, the MM remains inadequate and improperly defers mitigation. (See Sundstrom v. Cty. Of Mendocino (1988) 202 Cal.App.3d 296, 306)</p>	<p>The SEIR analysis (including mitigation) is consistent with the related mitigation in the MPWSP EIR/EIS. Specifically, legless lizard habitat restoration is not included in the mitigation measures in the MPWSP EIR/EIS even though the project was identified to have a potential significant impact on the species. Impacts to this species on parcels identified as development in the Fort Ord Habitat Management Plan have been mitigated for through the implementation of the HMP. The HMP does not require restoration of legless lizard habitat on development parcels.</p>	<p>Response noted.</p>
29	<p>D. Energy (1st major bullet). Final SEIR fails to provide support for conclusions regarding the Expansion's fossil fuel consumption. (Response to Comment VV-42.) Cal-Am Comment VV-42 notes that the Draft SEIR fails to justify its conclusions that the Expansion would consume less than 10 percent</p>	<p>The response provides a good faith, reasoned response that construction of the Proposed Modifications would not result in wasteful or inefficient use of energy. The Draft SEIR on pages 4.7-5 through 4.7-7 dedicates more than two pages of</p>	<p>M1W staff's response, just as the Final SEIR response, remains conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised. There is a continuing failure to</p>

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	<p>of fossil fuel assumed for the PWM/GWR Project, or that energy consumption for the Expansion would be efficient.</p> <p>Final SEIR Response to Comment VV-42 fails to address meaningfully Cal-Am's comment. The Final SEIR includes no updated analysis to support that the Expansion would not result in an inefficient or wasteful use of energy and only updates the Final SEIR to indicate that the estimated construction fuel consumption has been added to page 4.7-6 of the Draft SEIR. The Final SEIR response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>text to the discussion of impacts and mitigation measures and finds that a significant impact may occur and requires mitigation with performance standards to reduce energy use. The estimation of energy (fuel use) for construction was based on information contained in Appendix B of Appendix F of the Draft SEIR. This analysis expands upon the approved PWM/GWR Project analysis in its Volume I section 4.7 that dedicates 20 pages to energy and mineral resources, including 10 pages with information and analysis of construction. Response to comment VV-42 in the Final SEIR provides additional analysis to respond to comment VV-42.</p>	<p>include an updated analysis to support that the Expansion would not result in an inefficient or wasteful use of energy.</p>
30	<p>D. Energy (2nd major bullet). Final SEIR fails to address deferral of analysis and mitigation of impacts associated with MM EN-1. (Response to Comment VV-43.) Cal-Am Comment VV-43 raised concerns that MM EN-1, Construction Equipment Efficiency Plan, impermissibly defers analysis and mitigation of construction impacts and requested that MM EN-1 be updated to include specific performance targets pertaining to energy use during construction.</p> <p>Final SEIR Response to Comment VV-43 only partially addresses Cal-Am's concern by revising MM EN-1 to implement measures to limit heavy equipment idling. However, MM-EN-1 fails to include specific performance targets to ensure efficient energy use. Accordingly, MM-EN-1 continues to improperly defer mitigation under CEQA (see Sundstrom, supra, 202 Cal.App.3d at 306), and the Final SEIR also does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The public has been provided the technical analysis used to support the conclusions in the SEIR; the mitigation was amended as requested to contain performance targets with the addition of text provided in the Final SEIR, Chapter 5, page 5-15. M1W's inspectors and construction managers regularly and consistently monitor the contractors during construction and document compliance with energy efficiency requirements in the required plan, with the idling requirements, and with the mitigation. Additional performance targets have not been suggested by the commenter.</p>	<p>Cal-Am appreciates the edits made to the mitigation measure. However, MM-EN-1 still fails to include specific performance targets to ensure efficient energy use. Accordingly, MM-EN-1 continues to improperly defer mitigation under CEQA and does not satisfy the requirements of CEQA Guidelines Section 15088.</p>
31	<p>E. Geology, Soils and Seismicity. Final SEIR fails to provide an analysis of how and to what degree temporary construction-related erosion impacts will be mitigated. (Responses to Comment VV-47.) Cal-Am Comment VV-47 noted that the Draft SEIR did not provide any analysis or specific performance standards to indicate how potential temporary construction-related erosion impacts will be reduced to a less than significant level. Final SEIR Response to Comment VV-47 merely references its Response to Comment VV-48, noting that changes were made to provide page citations to descriptions of BMPs and</p>	<p>This comment is incorrect. Erosion control is a regulatory requirement of the local jurisdictions within which the components of the Proposed Modifications would be located. M1W and CalAm would be required to obtain and comply with City of Seaside grading permits for the injection and extraction wells and associated pipeline and appurtenant facilities, and with the State Water</p>	<p>The Final SEIR continues to provide an inadequate analysis of how or if impacts from temporary construction activities will be successfully mitigated through compliance with regulatory requirements. Even if the exact compliance with regulatory requirements is not incorporated into the Final SEIR, the document must clearly inform the public and decision makers the extent to which compliance will actually mitigate the impacts from the Expansion project. (See <i>Vineyard Area Citizens for</i></p>

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	other laws and regulations. The Final SEIR does not provide anything but a cursory analysis of how temporary erosion impacts from construction activities will be successfully mitigated through BMPs and compliance with laws. The Final SEIR must give an explanation of how and to what degree the impacts will be mitigated. The Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a good faith, reasoned response to the significant environmental points raised.	Resources Control Board General Permit for Construction Activities. M1W would also be required to obtain and comply with the County of Monterey grading permit for the segment of product water pipeline within the County jurisdiction and also the State General Construction Permit; thus, the permit requirements of these entities proscribe performance standards. It is unnecessary for an EIR to duplicate local and state requirements in mitigation measures when compliance with regulatory requirements would render an impact to be less than significant.	<i>Responsible Growth, Inc. v. City of Rancho Cordova</i> (2007) 40 Cal.4th 413, 449; see also <i>Sierra Club v. County of Fresno</i> (2018) 6 Cal.5th 502, 515-516 [an EIR must "enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project"].)
32	<p>F. Hazards, Hazardous Materials, and Wildfire (first major bullet). Final SEIR fails to incorporate mitigation requiring compliance with regulations regarding unexploded ordinance. (Response to Comment VV-51.) Cal-Am Comment VV-51 noted that while the Draft SEIR acknowledges that Expansion construction activities have the potential to encounter unexploded ordinance within the Fort Ord Military Reservation, it claimed these impacts would be addressed by compliance with federal and local regulations. Cal-Am Comment VV-51 therefore requested that the SEIR be revised to include specific mitigation to reduce potential impacts to a less than significant level.</p> <p>Final SEIR Response to Comment VV-51 summarily dismissed Cal-Am's concerns, asserting that a mitigation measure requiring compliance with regulations regarding discovery of unexploded ordinance was "unnecessary." Accordingly, the Final SEIR improperly defers mitigation related to discovery of unexploded ordinance by failing to include the requested mitigation measure (see <i>Sundstrom, supra</i>, 202 Cal.App.3d at p. 306) and the Final SEIR's conclusory response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	<p>The SEIR contains all the information needed for the public to assess environmental impacts and to understand compliance actions that would prevent significant impacts as concluded in the SEIR. Compliance with requirements within local codes are described in detail in the Draft SEIR on page 4.9-17 repeated here for clarity:</p> <p>"These potential effects would be addressed through the compliance with FORA's existing Right-of-Entry process. In addition to complying with FORA's Right-of-Entry process, M1W and its contractors must comply with the City of Seaside Municipal Code Chapter 15.34 (i.e., the "Ordinance Remediation District Regulations of the City" in Ordinance 924), and the County of Monterey Code or Ordinance Chapter 16.10.050 (Permit Requirements for Digging and Excavation on the former Fort Ord). These ordinances establish special standards and procedures for digging and excavation on properties in the former Fort Ord which are suspected of containing ordnance and explosives (also called munitions and explosives of concern). Ordinance 924 requires that a permit be obtained from the City of Seaside for any excavation, digging, development, or ground disturbance of any type involving the displacement of ten cubic yards or more of soil. The permit</p>	The response fails to address Cal-Am's comment in that it merely reasserts that the Expansion will, in the future, comply with whatever permit conditions might exist separate from the Final SEIR without inclusion of any mitigation measure. This remains an improper deferral of mitigation as explained in Cal-Am's comments. (See <i>Sundstrom, supra</i> , 202 Cal.App.3d at p. 306; CEQA Guidelines, § 15088.)

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		<p>requirements include providing each site worker a copy of the Ordnance and Explosives Safety Alert; complying with all requirements placed on the property by an agreement between the City, FORA, and DTSC; obtaining ordnance and explosives construction support; ceasing soil disturbance activities upon discovery of suspected ordnance and notifying the Seaside Police department, the Presidio law enforcement, the Army and DTSC; coordinating appropriate response actions with the Army and DTSC; and reporting of project findings.”</p> <p>These regulatory compliance requirements must be adhered to and including them within a mitigation measure would be unnecessary because it would be duplicative of requirements already in place.</p>	
33	<p>F. Hazards, Hazardous Materials, and Wildfire (2nd major bullet). Final SEIR fails to analyze the wildfire hazard risk posed by the PWM/GWR Project as a whole. (Responses to Comments VV-52 to VV-53.) Cal-Am Comments VV-52 to VV-53 noted that, while the Draft SEIR provides an analysis of potential wildfire hazards presented by the Expansion, M1W failed to assess cumulative impacts of the PWM/GWR Project and the Expansion as a whole. As such, Cal-Am Comments VV-52 to VV-53 requested that the SEIR be revised to incorporate a wildfire hazard assessment for the PWM/GWR Project as a whole, rather than just the Expansion.</p> <p>Final SEIR Responses to Comments VV-52 to VV-53 declined to include any assessment of the Expansion’s cumulative wildfire impacts with the PWM/GWR Project. The Final SEIR attempts to justify this refusal by asserting that the purpose of a supplemental EIR is not to reevaluate the impacts of the portions of a project that have already been approved. The Final SEIR noted that the Draft SEIR considered whether the Expansion could result in any new or increased risk of wildfire hazards when compared to the already approved PWM/GWR Project, but this is an impossibility because the PWM/GWR Project’s wildfire impacts have never been analyzed. Therefore, the Final SEIR response is inadequate and fails to analyze cumulative impacts as CEQA requires. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)</p>	<p>The public has been provided the technical work that supports the SEIR’s conclusions; the analysis in the Draft SEIR includes a cumulative wildfire hazard risk analysis that analyzes the combined impacts of the approved PWM/GWR Project and the Proposed Modifications on pages 4.9-23 through 4.9-24 of the Draft SEIR.</p>	<p>M1W’s staff’s response fails to recognize that the wildfire impacts associated with the PWM Project have never been adequately analyzed. (See Draft SEIR, p. 4.9-19 [PWM Project Final EIR “generally considered wildland fire hazards but did not devote a separate significant criterion to this topic”].) As a result, there has never been a complete review of the potential wildfire impacts related to the PWM Project as a whole, and the cursory cumulative analysis purporting to analyze impacts resulting from both the approved PWM Project and the Expansion is not based on substantial evidence. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].) The Final SEIR should have been revised to include wildfire-related impacts for the entire PWM Project, including both the approved PWM Project and the proposed Expansion project.</p>

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34	<p>G. Hydrology and Water Quality: Groundwater Final SEIR ignores the reasonably foreseeable impacts to groundwater from seawater intrusion of pursuing the Expansion as an alternative to the MPWSP. (Responses to Comments VV-56 to VV-57.) Cal-Am Comments VV-56 to VV-57 noted that if the Expansion is pursued as a replacement to the MPWSP, then the MPWSP's benefits to the Salinas Valley Groundwater Basin ("SVGB") will not occur (i.e., further seawater intrusion can be expected).</p> <p>Final SEIR Responses to Comments VV-56 to VV-57 avoid meaningfully responding to Cal-Am's comments by arguing that because the MPWSP does not currently exist, it is not presently providing any seawater intrusion benefits. Thus, the Final SEIR concludes that it would not reduce water injected into the SVGB compared to existing conditions, and no further analysis is necessary. The Final SEIR's response ignores that it is reasonably foreseeable that the Expansion will be considered an alternative water supply to the MPWSP. As such, the SEIR must consider the Expansion's impacts relative to those of the MPWSP in order to enable informed decision making. (CEQA Guidelines, § 15121). The record shows that the MPWSP would benefit the SVGB aquifers by reducing existing and preventing additional seawater intrusion. (MPWSP Final EIR/EIS, pp. 4.4-70, 4.4-92.) Therefore, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion is approved and the MPWSP is not built, including impacts to the SVGB's coastal aquifers from continuing seawater intrusion. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)</p>	<p>The SEIR evaluates the project pursuant to M1W Board direction as a back-up, not as an option in the place of, the MPWSP desalination project; the SEIR assumes the project would only operate if the MPWSP desalination project is not operating. Reiterating the response to VV-56, failure to construct and operate the MPWSP is not a potential impact of the Proposed Modifications. The Draft SEIR and the Final SEIR provide the technical work that supports the SEIR's conclusions that the Proposed Modifications would not adversely impact the Salinas Valley Groundwater Basin.</p> <p>The MPWSP would not inject any water into the SVGB; this is an incorrect statement in the comment. As requested by comments in Letter VV (including VV-56 and VV-57) a comparison of impacts of the MPWSP to the impacts of the Proposed Modifications is provided in the Final SEIR in Chapter 3 (see MR#5 on page 3-24 through 3-34 of the Final SEIR). A loss of benefit of another possible future project, i.e., due to failure to implement by a separate project proponent, in this case the MPWSP desalination project by Cal-Am, cannot be attributed as an adverse impact of another project, in this case, the Proposed Modifications.</p>	<p>Cal-Am did not suggest that the MPWSP would inject water into the SVGB. Rather, the MPWSP would benefit the SVGB by reducing existing and preventing additional seawater intrusion. Further, as part of the MPWSP, Cal-Am would return desalinated water to SVGB groundwater users in lieu of those users pumping from the SVGB. If the MPWSP does not exist, the SVGB would not experience these benefits. Therefore, the SEIR must evaluate the reasonably foreseeable environmental impacts to the SVGB that would result if the Expansion is approved and the MPWSP is not built.</p>
35	<p>H. Hydrology and Water Quality: Surface Water. Final SEIR fails to address the possibility that with the Expansion, the amount of water being diverted from the Carmel River may not be reduced. (Response to Comment VV-58.)</p> <p>Cal-Am Comment VV-58 raised significant questions regarding the Expansion's ability to meet water demand. If demand is not met, diversions from the Carmel River will not decrease or may need to increase to meet the shortfall.</p> <p>Final SEIR Response to Comment VV-58 fails to meaningfully analyze how the Carmel River will be impacted if the Expansion fails to meet demand or</p>	<p>The Proposed Modifications would increase water supplies for the CalAm Monterey District in the event that the MPWSP would not be timely implemented to meet the needs for replacement water, and would not result in increased diversions from the Carmel River.</p>	<p>Neither the Final SEIR nor M1W's staff response provides a good faith, reasoned response to the significant issues raised by CalAm. (CEQA Guidelines, § 15088; see <i>People v. County of Kern</i> (1974) 39 Cal.App.3d 830, 840-842.) As noted in CalAm's comments on the Final SEIR and comments here (see, e.g., Cal-Am Response #41), it is reasonably foreseeable that if the Expansion is approved, the MPWSP will not be approved. Cal-Am has provided ample evidence that the Expansion is incapable of meeting the Monterey Peninsula's demands without operating in tandem with the MPWSP. (See, e.g., Cal-Am Response #43.) Accordingly, CalAm remains concerned that the Expansion will be unable to provide a reliable water supply capable of lifting the</p>

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	otherwise provide any substantive answer. Instead, the response points to Response to Comment VV-34 and Master Response #3, which themselves are based on M1W’s disputed water supply analysis authored by Mr. Stoldt. The unsubstantiated and unvetted estimates of Mr. Stoldt do not constitute substantial evidence in support of the SEIR’s conclusions. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].) Reliance on Mr. Stoldt’s inaccurate analysis therefore results in significant undisclosed impacts to steelhead trout and other species from ongoing Carmel River diversions, which the SEIR fails to analyze as discussed in Section III.B. Additionally, the Final SEIR fails as an informational document because it should have evaluated the reasonably foreseeable environmental impacts that would result if the Expansion fails to meet demand. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.)		CDO restrictions and meeting the demands of customers in the Cal-Am service area. If demand remains unmet, diversions from the Carmel River will not decrease or may need to increase to meet the shortfall. This is a reasonably foreseeable environmental consequence resulting from approval of the Expansion, which the Final SEIR fails to evaluate. (CEQA Guidelines, § 15126; <i>Laurel Heights, supra</i> , 47 Cal.3d at p. 396.) M1W staff’s response does not grapple with the serious issues raised by Cal-Am’s comments and fails to meet the requirements of CEQA Guidelines Section 15088. (<i>Santa Clarita Org. for Planning v. County of L.A.</i> (2003) 106 Cal.App.4th 715, 723 [prohibiting agencies from ignoring “stubborn problems or serious criticism”].)
36	<p>I. Land Use, Agricultural and Forest Resources. Final SEIR does not assess potential land use impacts resulting from the failure of the Expansion to satisfy water demand on the Monterey Peninsula. (Responses to Comments VV-59 to VV-60 and VV-63 to VV-64.) Cal-Am Comments VV-59 to VV-60 noted that the Expansion would result in significant land use impacts if the project fails to provide adequate water supply to meet the Monterey Peninsula’s demand, and Cal-Am Comments VV-63 to VV-64 provide several examples of local planning objectives with which the Expansion would conflict if Cal-Am’s service area demand is not met.</p> <p>Final SEIR Responses to Comments VV-59 to VV-60 and VV-63 to VV-64 do not address Cal-Am’s concerns. To begin, the responses rely on M1W’s disputed water supply analysis authored by Mr. Stoldt to support the conclusion that the Expansion will enable Cal-Am to meet its Monterey district demand. As discussed further herein, Mr. Stoldt’s estimates do not constitute substantial evidence. (CEQA Guidelines, § 15384, subd. (a).) Notwithstanding these claims, the Final SEIR separately acknowledges the possibility that “more water than would be provided by the [Expansion] might be needed to meet demand for water on the Monterey Peninsula.” (Final SEIR, pp. 4-543 to 4-544.) This is a meaningful admission, but the Final SEIR fails to assess the reasonably foreseeable land use impacts that would result, instead claiming that “[u]nmet demand and resulting need for water would not be a consequence</p>	The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional growth. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives that require a new water supply. Unmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the Proposed Modifications. See also response to comment VV-56 and Chapter 3, MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)	<p>As explained in Cal-Am Responses #19 and 20 above, as a result of the Expansion, there will not be an adequate water source to supply the CSIP system, which will result in continued groundwater pumping and increase the likelihood of seawater intrusion in the SVGB. This unmet demand and potential environmental impact would be a direct result of the project. The potential for significant environmental impacts as a result of increased groundwater pumping for agricultural use, due to a failure to supply the CSIP system, is amplified by the Watermaster’s recent detection of signs of seawater intrusion and unmet demand to replenish the SVGB by an additional 1,000 AFY to prevent seawater intrusion. (See Cal-Am Response #17, Ex. C, pp. 50-51; Ex. F, p. 1, Ex. G, p. 1; Ex. H, p. 1.) Such impacts have not been evaluated. This fails to meet CEQA’s obligation that reasonably foreseeable environmental impacts be analyzed and disclosed. (CEQA Guidelines, § 15126; <i>Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.</i> (1988) 47 Cal.3d 376, 396.)</p> <p>Moreover, as stated in Cal-Am’s original Cal-Am Comment #36, which M1W has not responded to in earnest, by failing to meet the water demand, the Expansion would not be consistent with local policies, plans, and regulations adopted for the purpose of</p>

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	<p>or adverse physical environmental effect of the [Expansion].” (Final SEIR, pp. 4-543 to 4-544.)</p> <p>Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant impact on land use if it would “[c]ause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.” (Draft SEIR, p. 4.12-8.) Failure to meet water demand would constitute a significant land use impact of the Expansion by conflicting with numerous applicable land use policies that require sufficient water supplies. These applicable land use policies are outlined in Cal-Am Comment VV-63. Accordingly, by failing to meet the water demand, the Expansion would not be consistent with local policies, plans, and regulations adopted for the purpose of avoiding an environmental effect. The Final SEIR is therefore incorrect in asserting that “[u]nmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the [Expansion].” The Final SEIR has failed to assess potentially significant land use impacts and therefore fails as an informational document under CEQA. Cal-Am Comments VV-61 and VV-62 and the Final SEIR’s responses relate to the Draft SEIR’s water supply and demand analyses. The Final SEIR’s failure to provide substantial evidence in support of its water supply and demand conclusions is addressed in Section II, Responses to Comments VV-7 to VV-7g <i>supra</i>.</p>		<p>avoiding an environmental effect. Therefore, the SEIR fails as an informational document.</p>
37	<p>J. Marine Biological Resources (1st major bullet). Final SEIR fails to include additional source water quality data for the new sources of water to evaluate impacts to marine biological resources. (Response to Comment VV-68. Cal-Am Comment VV-68 requested that the SEIR include additional source water quality data for the new source waters (i.e., Farmworker Housing and Salinas River Diversion Facility backwash).</p> <p>Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the Farmworker Housing discharge is similar to municipal sewage and that the Salinas River diversion backwash has lower pollutant concentrations than urban or agricultural run-off. The Final SEIR makes these conclusions without analysis or support. Therefore, the Final SEIR response is conclusory and does not satisfy the requirements of CEQA</p>	<p>The Farmworker Housing and Salinas River Diversion Facility Backwash are not new source waters. Farmworker housing is a residential area and its municipal wastewater therefore will be the same as typical municipal wastewater flows whose water quality are accurately reflected by the data in the source water sampling campaigns in 2013 – 2014 and in 2018. The SRDF backwash is also an existing flow into the RTP that has occurred through the summer in 8 of the last 10 years. Again its constituents are reflected in the existing secondary effluent water quality results that were included in the Draft SEIR and used in the analysis of product water quality and reverse osmosis concentrate water quality for the Ocean Plan analysis for Surface Water Hydrology</p>	<p>Response noted.</p>

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	Guidelines Section 15088 to provide a response to the significant environmental points raised.	impacts. Water quality were provided in the Draft SEIR in Appendix E (summarized on pages 46 through 58 with detailed results presented in Appendix B) provided updated water quality information compared to the approved PWM/GWR EIR, Appendix D.	
38	<p>J. Marine Biological Resources (2nd major bullet). Final SEIR fails to analyze the actual marine biological effects of changes in the ocean discharge due to the Expansion. (Response to Comment VV-69.)</p> <p>Cal-Am Comment VV-69 requested that the SEIR marine biological impacts analysis provide a quantification of pollutant discharges or their impact on marine species within the Zone of Initial Dilution.</p> <p>Final SEIR Response to Comment VV-69 fails to provide the requested analysis and instead states that the analysis follows the California Ocean Plan guidelines and compares the volume within the Zone of Initial Dilution to the Monterey Bay volume to conclude that it would result in a negligible impact to marine species. The Final SEIR's failure to include an actual analysis and disclosure of associated impacts is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised.</p>	The analysis provided for the public in the SEIR provides an analysis that complies with CEQA. It is a quantitative analysis of the impacts on marine water quality and marine biological impacts according to the significance criteria established by M1W in the SEIR and follows the same methodology as the analyses in the MPWSP EIS/EIR and in the Approved PWM/GWR EIR both of which were prepared by the same consultant team, Trussell Technologies, who prepared the analysis herein. Also, both the Regional Water Quality Control Board and the Monterey Bay National Marine Sanctuary have approved the analysis assumptions and methodology and it is the basis for their approvals of M1W's existing NPDES Permit and MBNMS Authorization.	Response noted.
39	<p>K. Noise and Vibration (1st major bullet). Final SEIR does not adequately describe the nearest noise sensitive receptors or ambient noise levels for the extraction wells. (Response to Comment VV-70.)</p> <p>- Cal-Am Comment VV-70 noted that the Draft SEIR's description of the environmental setting for the Expansion did not include a description of the nearest noise sensitive receptors or ambient noise measurements for the new extraction wells, and requested that the SEIR be revised to incorporate such a description.</p> <p>- Final SEIR Response to Comment VV-70 summarizes existing noise and vibration conditions that are described in Appendix K and fails to provide any new analysis to address the points raised. The Final SEIR response is inadequate and does not satisfy the requirements of CEQA Guidelines</p>	The Draft and Final SEIR provided the requested information about noise sensitive receptors on page 5 through 7 of Appendix K. Minor revisions to Appendix K were included in the Final SEIR, including revisions to document the noise measurements taken as requested by this comment prior to completing the Final SEIR. M1W requested CalAm approval of the additional noise measurements prior to completing them because they were applicable to the CalAm components of the Proposed Modifications.	The Final SEIR still must be revised to incorporate the additional noise measurements conducted in the vicinity of Extraction Wells 1 and 2 in March 2020—at present, these measurements are only discussed in revisions to Appendix K. (See Final SEIR, Appx. K, pp. 35, 38.)

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	Section 15088 to provide a response to the significant environmental points raised.		
40	<p>K. Noise and Vibration (2nd major bullet). Final SEIR continues to utilize inconsistent thresholds to assess daytime construction noise impacts and fails to disclose a potentially significant noise impact. (Responses to Comments VV-73 to VV-74.)</p> <p>- Cal-Am Comments VV-73 to VV-74 raised concerns that the Draft SEIR appeared to use inconsistent standards for assessment of construction noise impacts. Cal-Am Comments VV-73 to VV-74 noted that based on the noise threshold applied elsewhere in the SEIR, construction noise related to the conveyance pipeline would result in noise levels above the 70 dBA Leq threshold and therefore appeared to constitute a significant undisclosed impact.</p> <p>- Final SEIR Responses to Comments VV-73 to VV-74 attempt to justify use of a two-week threshold for assessing noise impacts caused by construction of the conveyance pipelines by referring to the use of such a threshold in other project EIRs. The Final SEIR also makes the unsupported assertion that daytime construction noise exceeding 70 dBA Leq would not “cause a nuisance or result in significant environmental noise impact,” unless the construction noise lasted more than two weeks. However, the Final SEIR fails to provide any evidence or explanation for the invented threshold it is applying. Accordingly, it appears that the Expansion would exceed adopted construction noise thresholds, and the Final SEIR fails to disclose a significant noise impact associated with construction of the conveyance pipeline, such that recirculation is required. (CEQA Guidelines, § 15088.5, subd. (a).)</p>	A lead agency has discretion to use thresholds of significance based on substantial evidence and this case, application of commonly used thresholds (i.e., thresholds used by local agencies within which the project is located) is appropriate and supported by substantial evidence.	Neither the Final SEIR nor M1W staff's response explains how substantial evidence justifies use of a different threshold for assessment of noise impacts related to construction of the conveyance pipelines than for all other Expansion components. The assertion that a lead agency has the authority to choose thresholds of significance based on substantial evidence does not make up for a lack of actual substantial evidence to support that decision. (See, e.g., <i>Golden Door Properties, LLC v. Cty. of San Diego</i> (2018) 27 Cal.App.5th 892, 904-905 [significance threshold must be “justified by substantial evidence to explain why it is sufficient for use” in assessing project impacts].) Given that the SEIR applies one threshold of significance for impacts related to construction noise for all Expansion components but the conveyance pipeline, the mere fact that other agencies have applied a two-week significance threshold for other projects does not justify the SEIR's deviation from the 70 dBA Leq standard that it applies to construction noise impacts for all other Expansion components. The Final SEIR should be revised to explain M1W's precise justification for applying a different construction noise impact threshold for the conveyance pipelines than all other Expansion components.
41	<p>L. Population and Housing (1st major bullet). Final SEIR fails to account for any housing and population impacts related to the Expansion's potential inability to provide adequate water supply. (Response to Comment VV-79.)</p> <p>- Cal-Am Comment VV-79 noted that the Draft SEIR failed to include any analysis of population and housing impacts related to the potential inability of the Expansion to meet the Monterey Peninsula's water demand, without implementation of the MPWSP. Cal-Am explained that, based on the supply and demand numbers adopted by the CPUC and analyses put forth by Cal-Am's experts, the Expansion cannot provide a reliable water supply sufficient to meet demand on the Peninsula. Moreover, even under the</p>	The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional growth. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives for population and housing such that an environmental impact would result even if that objective would require an additional new water supply. Unmet demand and resulting need for water would not be a consequence or adverse physical	M1W staff's response does not acknowledge the thrust of Cal-Am's comments. As noted in Cal-Am's comments on the Final SEIR, one reasonably foreseeable scenario if the Expansion is approved is that the MPWSP would not be approved. Further, as explained in Cal-Am Responses #43-46 below, without the MPWSP, the Expansion would only satisfy the reduced five-year demand average put forward by the Initial Stoldt Memo for three years before demand exceeds supply. At that point, the Monterey Peninsula would not have a sustainable water supply available to accommodate population and housing growth. This is a reasonably foreseeable environmental consequence resulting from

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	<p>unsupported demand estimates put forth in the Initial Stoldt Memo, the Expansion would only satisfy a reduced five-year demand average for three years before falling out of compliance. Thereafter, the Monterey Peninsula would be without a reliable water supply to accommodate reasonable growth. Therefore, Cal-Am requested that the SEIR be revised to account for that uncertainty and to disclose any resulting impacts on population and housing.</p> <p>- Final SEIR Response to Comment VV-79 does not address these concerns, and instead notes that the Expansion is intended to serve as a back-up supply if the MPWSP is delayed. The Final SEIR then attempts to avoid responsibility for assessing any potential failure of the Expansion to provide water sufficient to meet growing demand on the Peninsula by stating that “agencies approving any development projects that might increase water demand would need to take in to account the water supply that would be available through the [Expansion]”</p> <p>However, that response improperly defers the analysis of a reasonably foreseeable environmental consequence that would result from the Expansion’s approval. Specifically, it is reasonably foreseeable that as a result of approval of the Expansion, the MPWSP would not be approved and thus the Peninsula’s future water demand would not be met. The SEIR therefore must evaluate housing impacts related to the inability of the Expansion to meet the Monterey Peninsula’s water demand without implementation of the MPWSP. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at p. 396.)</p>	<p>environmental effect of the Proposed Modifications. See also response to comment VV-79 and Chapter 3, MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)</p>	<p>approval of the Expansion, which the Final SEIR fails to evaluate. (CEQA Guidelines, § 15126; <i>Laurel Heights, supra</i>, 47 Cal.3d at p. 396.)</p>
42	<p>L. Population and Housing (2nd major bullet). Final SEIR fails to disclose a potential significant impact to population and housing regarding a failure to supply sufficient water to accommodate regional affordable housing goals. (Responses to Comments VV-80 to VV-82.) - Cal-Am Comments VV-80 to VV-82 noted that failure to provide a water supply sufficient to accommodate increased demand and population growth on the Monterey Peninsula could depress the buildout of necessary affordable housing on the Peninsula, as dictated by the Regional Needs Housing Assessment (“RHNA”) for the Monterey Bay Area. Based on the predictions set forth in the Initial Stoldt Memo, the Expansion could only meet Peninsula demand, even with depressed demand numbers, for a maximum of three years, after which the Peninsula would be without excess water supply to accommodate regional housing</p>	<p>The SEIR provides technical information as requested in this comment for the public to understand the physical environmental impacts of the Proposed Modifications on regional affordable housing. Implementation of a water supply project would not cause land use jurisdictions to be unable to meet their objectives for population and housing such that an environmental impact would result. Unmet demand and resulting need for water would not be a consequence or adverse physical environmental effect of the Proposed Modifications. See also response to comment VV-80 and 81 and Chapter 3,</p>	<p>M1W staff’s response does not address the potential impact on housing and population if the Expansion is unable to provide a water supply capable of accommodating regional housing growth. As discussed in Cal-Am Responses #43-46 below, even under the conservative supply and demand projections in the Initial Stoldt Memo, the Expansion could only meet Peninsula demand for a maximum of three years, at which point the Peninsula would not have any excess water supplies to accommodate regional housing growth, including established affordable housing goals. If the Expansion, without the MPWSP, cannot produce a sufficient water supply to accommodate housing growth on the Peninsula, area residents—including low income residents—will be unable to secure housing. The Final SEIR does not assess this reasonably foreseeable potential for displacement as required by CEQA.</p>

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	<p>growth. This failure to meet RHNA goals for affordable housing buildout would be a significant impact that the Draft SEIR failed to analyze.</p> <p>- Final SEIR Responses to Comments VV-80 to VV-82 do not attempt to address this potential impact on population and housing. The Final SEIR instead simply refers back to responses to comments VV-56, VV-63, and VV-79, Master Response #3, and Appendices N and O to the Final SEIR. None of these responses provide an analysis of a possible situation where the Expansion cannot meet Peninsula water demand and therefore cannot accommodate regional affordable housing goals. Rather, Master Response #3 attempts to argue that a failure by the Expansion to produce sufficient water to accommodate growth “would not be a consequence or adverse physical environmental effect” of the Expansion and therefore does need not be analyzed in the SEIR. Consistent with Appendix G of the CEQA Guidelines, the Draft SEIR explains that the Expansion would have a significant population and housing impact if the Expansion would “a. induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or b. displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.” (Draft SEIR, p. 4.15-8.) In evaluating these significance criteria, the Draft SEIR examines compliance with population and housing needs projections including the RHNA. Failure of the Expansion to produce sufficient water to accommodate the Peninsula’s population would be a direct result of the Expansion and could result in the displacement of Peninsula residents - including low income residents that are unable to secure adequate housing. This potential for displacement is a reasonably foreseeable significant impact that the SEIR fails to analyze. (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396.) The SEIR’s failure to analyze this reasonably foreseeable significant impact and the Final SEIR’s conclusory response do not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p>	MR#3 (Master Response to Comments on Water Supply and Source Water Availability.)	(CEQA Guidelines, § 15126; <i>Laurel Heights, supra</i> , 47 Cal.3d at 396.)
43	<p>M. Water Supply and Waste Water Systems (1st major bullet). The Final SEIR fails to analyze changed circumstances and new information affecting water supplies. (Responses to Comments VV-83 to VV-86.)</p>	The SEIR provides substantial technical information about water supplies to enable the public and decisionmakers to understand and comment on the environmental impacts of the Proposed Modifications on Water Supply and Wastewater Systems including	M1W’s response still fails to consider or inform the public and decisionmakers of the changed circumstances and new information affecting water supplies for the Expansion. In fact, the issues identified in Cal-Am’s prior comment letter are only more significant in light of additional information and expert

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	<p>Cal-Am Comments VV-83 to VV 84 expressed concerns that the Draft SEIR was not adequately evaluating changed circumstances, such as climate conditions, since approval of the PWM/GWR Project Final EIR. While the Draft SEIR asserts that “[t]he existing environmental setting information contained in the PWM/GWR Project Final EIR has generally remained unchanged since the certification of the PWM/GWR Project Final EIR” (Draft SEIR p. 4.18-3), Cal-Am commented that the Draft SEIR does not evaluate if changes to climate conditions have impacted the availability of water sources for the Expansion since approval of the PWM/GWR Project.</p> <p>- Final SEIR Responses to Comments VV-83 to VV-84 state that the Draft SEIR considered recently published and collected data, and that changes to water supplies from climate conditions and agricultural and municipal water conservation were incorporated into the Draft SEIR analysis at Section 4.18. Further, these responses point to and summarize the Greater Monterey County and the Monterey Peninsula Integrated Regional Water Management Plans, which were not previously evaluated in Draft SEIR Section 4.18, in an effort to demonstrate that source waters have not been reduced by climate change. However, neither Draft SEIR Section 4.18 or the Final SEIR’s summary of the integrated regional water management plans provide meaningful analysis demonstrating that water sources for the Expansion have remained unchanged by climate conditions or other changed circumstances. As a result, the Final SEIR’s response does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p> <p>- Cal-Am Comments VV-85 to VV-86 provide examples of reduced availability of water supplies since the approval of the PWM/GWR Project Final EIR that have not been evaluated in the Draft SEIR. One example identified was the reduced availability of Tembladero Slough source water that occurred since the approval of the PWM/GWR Project.</p> <p>- Final SEIR Responses to Comments VV-85 to VV-86 concede that the Draft SEIR’s reliance on the Tembladero Slough as a reliable water source was in fact unreliable and the Final SEIR no longer accounts for Tembladero Slough as a source of water. The removal of Tembladero Slough as a water source is just one of several examples of water supplies that have proven to be unreliable or unavailable despite M1W’s prior assurances that such sources were secured. Given the change and significant reallocation of source waters</p>	<p>information on climate change effects and assumptions. A summary of these topics is provided in MR#3 (Chapter 3, section 3.3 of the Final SEIR). In addition, response to comment VV-83 demonstrates that M1W has continually aimed to incorporate the latest published, scientific research on climate change into its water and wastewater planning. M1W staff, including Operations Managers, Engineering Manager and Principal Engineer were consulted in developing assumptions for the SEIR analyses of these issues. In addition, M1W leadership and ongoing active participation in the Monterey County Drought Contingency Plan, the Salinas and Carmel River Basins Study, and both Integrated Water Resources Management Planning efforts demonstrates that the latest science and forecasting data is consistently used for decision-making, technical reporting, and planning activities of M1W. M1W’s analyses of source waters, including municipal wastewater and other new source waters, are based on actual data collected, recorded, and reported to regulatory agencies by M1W. Where actual flows were not available, assumptions were developed by M1W staff based on their expertise and knowledge including certifications and licenses issued by the State of California. Appendices I and M, and MR#3 document how water sources have changed and may change in the future.</p>	<p>analysis regarding water supply and demand on the Monterey Peninsula and source waters for the Expansion that have been provided to the California Coastal Commission.</p> <p>Attached to this response are four documents that were submitted in connection with Cal-Am’s November 5, 2020 Coastal Development Permit application that demonstrate the inadequacy of the water supply and demand analysis in the Expansion’s Final SEIR. (See Ex. A, B, C, and D.)</p> <p>The first document, Exhibit A, is a copy of Exhibit M to Cal-Am’s CDP application, which includes an abundance of technical analysis, including multiple reports from Hazen & Sawyer demonstrating the infeasibility of the Expansion and establishing that there is a significant shortfall of available source waters for both the PWM/GWR Project and the Expansion, even when the MPWMD’s lowest estimate of demand for the Peninsula is used. Indeed, since Cal-Am’s April 24, 2020 letter, water experts at Hazen & Sawyer have prepared three technical memoranda explaining that the water supply and demand analysis conducted in the Final SEIR for the Expansion is inaccurate and utilizes outdated flow information.</p> <p>The first document in Exhibit A is an August 11, 2020 Hazen & Sawyer memo that explains that the water supply and demand analysis conducted in the Final SEIR for the Expansion is inaccurate and utilizes outdated flow information. This memo demonstrates that when the outdated flow information considered in the Final SEIR is updated based on projections from publicly available flow data from M1W and USGS, the PWM/GWR Project and the Expansion. cannot adequately meet even the lowest demand projected in the March 13, 2020 memorandum prepared by David Stoldt and relied upon in the Final SEIR. (Ex. A, Exhibit 1, pp. 5-6.)</p> <p>In response to the August 11, 2020 Hazen & Sawyer memo, M1W staff released wastewater flow information for 2014 to 2019 to the public for the first time, which only confirmed that wastewater flow has significantly declined by 2,110 acre-feet since 2013, as</p>

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	<p>proposed in the Final SEIR and Appendix M, it is apparent that the SEIR should be revised and recirculated to fully account for and evaluate the reliability of the revised set of source water proposed in Appendix M. (CEQA Guidelines, § 15088.5, subd. (a) [CEQA Guidelines require recirculation when a draft EIR is “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.”].)</p>		<p>Hazen & Sawyer predicted. Despite this significant new information, this data still has not been analyzed in the Final SEIR for the Expansion. This new wastewater flow information, included in M1W’s August 20, 2020 letter to the CCC, is attached hereto as <u>Exhibit E</u>.</p> <p>The second document in Exhibit A, the August 23, 2020 Hazen & Sawyer memo, accomplishes what the Final SEIR does not by analyzing this new wastewater flow information and concluding that there would still be insufficient source waters for the Expansion even if MPWMD’s low estimate of demand is used. (Ex. A, Exhibit 2, pp. 1-7.)</p> <p>The third exhibit in Exhibit A, Hazen & Sawyer’s September 10, 2020 memorandum, was prepared in response to the August 25, 2020 California Coastal Commission Staff Report concerning the MPWSP and demonstrates that when current data and wastewater trends are taken into account, along with the new wastewater flow information provided by M1W and actual surface water flows, the PWM/GWR Project and the Expansion would not have sufficient source water to provide the Monterey Peninsula with an adequate water supply during both normal and dry years even under the lowest demand estimate of 10,855 acre-feet per year. (See Ex. A, Exhibit 3.)</p> <p>Particularly noteworthy is Appendix A to the September 10, 2020 Hazen and Sawyer memo, in which Hazen & Sawyer provide a comprehensive analysis of water supply and demand on the Monterey Peninsula, accounting for different scenarios based on the actual variability in water supply. Appendix A demonstrates that when ASR supplies are described at reasonable levels, the Expansion cannot meet even the lowest demand estimates set forth by the MPWMD of 10,855 afy. Similarly, when WWTP and Reclamation Ditch flows to the PWM/GWR Project and Expansion are reduced to account for updated wastewater data, the Expansion cannot meet the lowest estimate of demand in Cal-Am’s service area. (Ex. A, Exhibit 3, p. 13.)</p>

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			<p>Finally, Exhibit 4 in Attachment A is a table that responds to a letter from Robert Holden, a former M1W employee. This table evaluates each of the fourteen Expansion source waters identified in the Final SEIR. The table demonstrates that even under the most conservative estimates, the fourteen source waters cannot realistically supply enough actual water for both the PWM/GWR Project and the Expansion to achieve their planned outputs. (Ex. A, Exhibit 4 [“Analysis of Expansion Source Water Deficiencies in Response to Comments from Robert B. Holden”].)</p> <p>We also attach as <u>Exhibits B, C, and D</u> to this response relevant excerpts from a letter Cal-Am submitted to the CCC on September 11, 2020, regarding the MPWSP. The letter Cal-Am sent to the CCC included a proposed Applicant’s Staff Report that would have allowed the CCC to approve the MPWSP subject to special conditions, as well as responses to the CCC staff report and comments submitted to the CCC by MCWD. <u>Exhibit B</u> is the Assessment of Alternatives section from Applicant’s Staff Report and explains that the Expansion is not a viable alternative to the MPWSP, in part because (1) major concerns exist regarding the availability of source water supplies and lack of funding, (2) existing contracts do not grant source water rights to the Expansion, (3) Salinas Valley constituents dispute the Expansion’s claim to agricultural runoff, (4) there are significant technical problems with PWM/GWR Project, (5) expert analysis shows insufficient wastewater in the region to meet source water needs, and (6) recirculation of the Expansion Final SEIR is required. <u>Exhibits C and D</u> address specific contentions and arguments regarding the viability of the Expansion made by CCC Staff and MCWD, respectively, and demonstrate that the PWM/GWR Project and the Expansion cannot adequately meet even the lowest demand projections for the Monterey Peninsula.</p> <p>Finally, we attach as <u>Exhibits J and K</u> recent declarations from the United States Department of Agriculture and the Governor of California, respectively, that highlight alarming drought conditions in California. The Department of Agriculture has designated 50 California counties as primary natural disaster areas due to drought, identifying the County of Monterey as contiguous</p>

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			<p>with at least one of these disaster areas. (Ex. J [“March 5, 2021 USDA California Natural Disaster Declaration”], p. 2.) Likewise, Governor Newsom has declared a State of Emergency due to drought conditions in Mendocino and Sonoma Counties. (Ex. K [“April 21, 2021 Governor Newsom State of Emergency Proclamation”].) These exhibits underscore the reality that water shortage in California is an increasingly severe problem—one which necessitates careful analysis for water supply projects, like the Expansion.</p> <p>The above documents and analysis reveal the following about Final SEIR.</p> <ul style="list-style-type: none">• The Final SEIR does not consider post-2013 WWTP flow data, which demonstrates a consistent trend of decreasing WWTP flow to source the Expansion, despite the fact that M1W apparently possessed this data when preparing the Final SEIR. Based on this data, the PWM/GWR Project and the Expansion cannot reasonably be expected to produce 3,500 acre-feet per year and 2,250 acre-feet per year, respectively. (See Ex. A, Exhibit 2, p. 4; Ex. B [“Excerpts from Applicant’s Staff Report”], Section IV. O.1; Ex. C [“Response to CCC Staff”], Section J.2.b; Ex. D [“Response to MCWD”], Section I.2].)• Overall demand for the source waters listed for the Expansion far exceeds available supplies in both Normal/Wet years and Dry years. (Ex. A, Exhibit 2, p. 6; Ex. C, Section J.3; Ex. D, Section I.4.) This defect will be exacerbated under drought conditions, which pose a constant threat to California’s water supply. (See Ex. J; Ex. K.)• The following issues remain regarding claimed Expansion source waters: ARWRA source waters; questionable modifications of source waters; disputed agricultural source waters; source water quality issues;

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			<p>and overestimation of water supplies during drought years.</p> <ul style="list-style-type: none">• The Final SEIR’s deflated water demand figures—which the Expansion still cannot meet—also fail to account for the additional 1,000 AFY required by the Seaside Groundwater Basin Watermaster to achieve protective levels to prevent seawater intrusion—which a recent report determined may already be underway. (See Cal-Am Response #17, Ex. C. pp. 50-51; Ex. F, p. 1, Ex. G, p. 1; Ex. H, p. 1.)• Because the Expansion does not have sufficient source water supply, M1W will have to choose between supplying source water for the Expansion or for the CSIP system. (See Cal-Am Response #19; Ex. A, Exhibit 2, pp. 13-14.) Without sufficient source water to supply CSIP, seawater intrusion in the Salinas Valley Groundwater Basin will continue to progress, disproportionately affecting the residents of the disadvantaged community of Castroville. <p>Under CEQA, when “significant new information” is added to an EIR after the public notice and comment period, but before certification of the EIR, the lead agency must provide notice of an additional public comment period before certifying the EIR. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; <i>Save Our Peninsula Committee</i>, 87 Cal.App.4th 99, 130; <i>Cadiz Land Co. v Rail Cycle</i> (2000) 83 Cal.App.4th 74, 95.)</p> <p>The newly released post-2013 WWTP flow information, as well as the subsequent analysis of this data, constitutes significant new information under CEQA because M1W must identify and analyze available water sources for the Expansion in order to demonstrate whether that project is feasible or whether potential environmental impacts could result. Regardless of where any new, required water is sourced, its diversion to the Expansion could</p>

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			<p>generate a significant new impacts, which have yet to be evaluated.</p> <p>Likewise, by not including post-2013 WWTP flow data, which appears to have been in M1W's possession for years, M1W has created a document "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (See CEQA Guidelines, § 15088.5, subd. (a)(4).) Because the public and decisionmakers were unable to analyze accurately whether the Expansion could achieve its stated purpose, the Final SEIR failed in its fundamental purpose as an informational document by excluding this crucial information from public consideration. As a result, the Final SEIR needs to be revised and recirculated for public comment.</p>
44	<p>M. Water Supply and Waste Water Systems (2nd major bullet). The Final SEIR inappropriately relies on source water from the ARWRA. (Response to Comments VV-87 to VV-91 and VV 104 to VV-105.)</p> <p>- Cal-Am Comments VV-87 to VV-91 and VV 104 to VV-105 noted that the Draft SEIR overstates the security of source water subject to the ARWRA, while ignoring the significance of the conditions precedent that must be met in the ARWRA for all sources of water to become fully secured.</p> <p>- Final SEIR Responses to Comments VV-87 to VV-91 and VV 104 to VV-105 continue to overstate the availability of source waters under the ARWRA for the Expansion and present additional interpretation flaws that show the source waters for the Expansion are not secured.</p> <p>- First, Appendix M of the Final SEIR discusses new source waters available for use as set forth in the ARWRA, claiming that the ARWRA and Amendment No. 1 to the ARWRA allow M1W to use multiple categories of source water for the Expansion. (Final SEIR Appendix M, p. 5.) Appendix M continues to improperly assume that ARWRA new source waters apply to the Expansion, despite the fact that the ARWRA does not contemplate such a use. (See ARWRA Recitals pp. 6-7; Section.01 1(d).) The ARWRA was approved based on the 2015 Final EIR for the PWM/GWR Project, and the ARWRA has</p>	<p>M1W has provided technical information to support its conclusions about its water rights under a variety of scenarios. The following provides clarifying information related to this comment:</p> <ul style="list-style-type: none"> • The analysis in Appendix M shows that M1W possesses rights to wastewater that it treats such that it can produce the yield described in the Proposed Modifications without the use of any New Source Waters (as defined in the ARWRA). • The analysis in Appendix M does not state that the conditions precedent would be met by June 20, 2020. M1W staff received input and disclosed that MCWRA does not intend to fund the new source waters until well beyond that date and has requested an extension to Amendment No. 1 that would continue to allow M1W to use the New Source Waters for influent to the AWPf. • The lack of completion of conditions precedent in the ARWRA does not preclude M1W from using 	<p>The Final SEIR fails to analyze the availability of source water for the Expansion. M1W continues to ignore the fact that water rights under the ARWRA between M1W and the Monterey County Water Resources Agency ("MCWRA") are not actually available for the Expansion. To date, the ARWRA, which sets forth the responsibilities for construction, operation, and financing of new source water for the PWM/GWR Project, including Reclamation Ditch flows, Blanco Drain flows, Agricultural Wash Water, and M1W's ARWRA Summer Water, is not yet effective. (Ex. A, Exhibit 4; Ex. B, Section IV.O.1; Ex. C, Section J.2.a; Ex. D, Section I.2.)</p> <p>The ARWRA includes multiple outstanding conditions that are required to be completed before the ARWRA can become effective, although M1W and MCWRA amended the agreement in June 2019 to allow additional time to address the conditions while allowing M1W to use the new source waters for the PWM/GWR Project until the conditions are met. However, the conditions to the ARWRA have yet to be satisfied and it is speculative to assume when the agreement will become effective. (Ex. B, Section IV.O.1.)</p> <p>Moreover, MCWRA has informed M1W that "the current Amended and Restated Recycling Water Agreement ("ARWRA")</p>

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	<p>not been revised to allow water to be used for the Expansion. (See ARWRA Recitals pp. 6-7; Amendment No. 1.)</p> <p>- Second, instead of providing a definitive answer as to the total quantity of available source water for the Expansion, the Final SEIR avoids the question by providing four alternative scenarios in Appendix M. The estimates include normal/wet scenarios versus dry/drought scenarios when the conditions precedent in the ARWRA are met, versus when they are not. (Final SEIR, pp. 3-14 to 3-15.) However, two scenarios assume the ARWRA conditions precedent are met by June 30, 2020, which is virtually impossible. Therefore, these scenarios are neither realistic nor reasonable, and cause the Final SEIR to fail as an informational document. The other two scenarios that assume conditions are met are likewise unreasonable and speculative. These scenarios purport to demonstrate sufficient supplies for the Expansion by relying on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. M1W has not explained how or why this increase has occurred. This critical information was not subject to public review and comment. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (Id.) By substantially altering the water sources and supplies purportedly available to the Expansion, M1W has precluded meaningful public review and comment on this critical issue for the Expansion, and recirculation is now required. (<i>Save Our Peninsula Comm.</i>, <i>supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)</p> <p>- Third, recognizing M1W has water rights issues with respect to the applicability of the ARWRA's new source water facilities for the Expansion, Appendix M assumes no new source waters would be used for the Expansion, regardless of whether the conditions precedent in Section 16.15 of the ARWRA are met. (Final SEIR Appendix M, p. 9.) To that end, Appendix M uses an “updated set of assumptions . . . represent[ing] newer information.” (Id., pp. 9-11.) Appendix M does not state where these assumptions come from, who made the assumptions or whether they are accurate. For instance,</p>	<p>its rights to secondary treated effluent that it produces.</p> <ul style="list-style-type: none"> Appendix M was prepared by licensed engineers collaboratively with other M1W and MCWRA staff. Its assumptions and methodology have been provided to the public for their review and consideration. Multiple meetings between MCWRA and M1W have occurred since June of 2019 to discuss the data, methodology, and assumptions. The public has been provided information to support the SEIR conclusions. The analysis provided in Appendix M does not change the conclusions related to the environmental impacts of the Proposed Modifications. The availability of less water for recycling, if that were to occur, would not create new significant impacts, nor worsen the severity of the significant impacts already identified. This analysis does not provide any additional mitigation or alternatives that the Board would decline to adopt. The information merely clarifies or amplifies the information and supporting document in the Draft SEIR that was the basis for the SEIR conclusions in response to the comments on the Draft SEIR. 	<p>between MCWRA and M1W does not contemplate this expansion Project.” (Ex. A, Exhibit 4 [quoting April 27, 2020 MCWRA Letter to M1W re the Pure Water FSEIR, at 2].)</p> <p>Consistent with MCWRA's understanding of the ARWRA, the City of Salinas also disputes M1W's ability to use AWW for the Expansion and asserts that the ARWRA only permits M1W to use AWW for the PWM/GWR Project. In its letter April 27, 2020 letter to M1W, Salinas explains that these water sources are not available for the Expansion because “the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City's agriculture industry, as determined by the City in its sole and absolute discretion.” (Ex. A, Exhibit 6 [“April 27 City of Salinas Letter”], p. 2.)</p> <p>As demonstrated in the Analysis of Expansion Source Water Deficiencies in Response to Comments from Robert B. Holden, the Final SEIR also fails to analyze many of the non-ARWRA water sources for the Expansion. (Ex. A, Exhibit 4.) Most critically, Appendix M assumes 5,811 afy from Secondary Effluent to Ocean Outfall, however, when average annual wastewater flows to the M1W outfall for the most recent 3 years (18,555 AFY) are considered, instead of the 18,810 AFY used in the Final SEIR, the 5,811 AFY of available wastewater discussed in the Final SEIR is further reduced to 5,732 acre-feet. (Ex. A, Exhibit 3, p. 2.) When considering 2020 wastewater flow data (17,980 acre-feet), ocean outfall wastewater effluent is reduced yet again to 5,554 acre-feet. (<i>Ibid</i>; Ex. A, Exhibit 4, pp. 1-2; Ex. B, p. 165.)</p> <p>Of this 5,732 to 5,554 acre-feet, the PWM/GWR Project requires 4,320 acre-feet or 4,568 acre-feet to produce 3,700 acre-feet when building a drought reserve. (<i>Ibid</i>.) The Regional Urban Water Augmentation Project (“RUWAP”) requires an additional 822 acre-feet or 741 acre-feet with backwash flows reintroduced. (<i>Ibid</i>.) Accordingly, the remaining amount of wastewater available to the Expansion, less the wastewater needed for the PWM/GWR Project and the RUWAP, is between 432 acre-feet (5,732 minus 4,568 minus 741) and 245 acre-feet (5,554 minus</p>

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	<p>the Final SEIR relies upon the availability of certain municipal wastewater flows even though the Final SEIR acknowledges that such flows have not previously been metered and that the estimates are based in part upon assumptions. (Final SEIR, p. 24-25 [Master Response # 3, pp. 3-11 to 3-12].) As a result, the analysis provided in the Final SEIR is wholly speculative and not based on substantial evidence. (CEQA Guidelines, § 15384, subd. (a) [“Argument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly erroneous or inaccurate . . . does to constitute substantial evidence.”].)</p> <p>- In addition to these numerous issues, the Final SEIR’s response is conclusory and does not satisfy the requirements of CEQA Guidelines Section 15088 to provide a response to the significant environmental points raised in the review and consultation process.</p>		<p>4,568 minus 741). (<i>Ibid.</i>) This is far less than is required to operate the Expansion.</p> <p>Despite this new information, Appendix M still assumes no new source waters would be used for the Expansion, regardless of whether the conditions precedent in the ARWRA are met. (Final SEIR Appendix M, p. 9.) To that end, Appendix M continues to use an “updated set of assumptions . . . represent[ing] newer information.” (<i>Id.</i>, pp. 9-11.) The Final SEIR continues to rely upon the availability of certain municipal wastewater flows even though the Final SEIR acknowledges that such flows have not previously been metered and that the estimates are based in part upon assumptions. (Final SEIR, p. 24-25 [Master Response # 3, pp. 3-11 to 3-12].)</p> <p>Because the Expansion does not have sufficient source water supply, M1W will have to choose between supplying source water for the Expansion or for the CSIP system. (See Cal-Am Response #19; Ex. A, Exhibit 2, pp. 13-14.) Without sufficient source water to supply CSIP, seawater intrusion in the Salinas Valley Groundwater Basin will continue to progress, disproportionately affecting the residents of the disadvantaged community of Castroville.</p> <p>In any case, even when assuming full production from the PWM/GWR Project and the Expansion, Hazen & Sawyer’s analysis demonstrates that without the MPWSP there is still insufficient water supply to meet even MPWMD’s lowest demand estimates, when controlling for ASR conditions. (Ex. A, Exhibit 3, p. 13.) Again, when the additional the additional 1,000 AFY required by the Seaside Groundwater Basin Watermaster to achieve protective levels to prevent seawater intrusion is taken into account, the Expansion’s shortfall is even more severe. (See Cal-Am Response #17, Ex. C, pp. 50-51; Ex. F, p. 1, Ex. G, p. 1; Ex. H, p. 1.)</p> <p>Finally, Cal-Am notes that M1W recently revised a portion of the Project Description section of the Final SEIR discussing the ARWRA. According to M1W, it is currently in negotiations with</p>

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			MCWRA that “could” change the allocation of some wastewater flows between M1W and the MCWRA via a potential, future amendment to the ARWRA. However, whether or not such an amendment is approved is pure speculation. M1W cannot simply rely on a potential amendment to the ARWRA, which is still under negotiation and has neither been released to the public nor analyzed, to avoid the deficiencies in the Final SEIR related to the analysis of the Expansion’s source water.
45	<p>M. Water Supply and Waste Water Systems (3rd major bullet). The Final SEIR continues to overlook the availability of water supplies during drought years. (Responses to Comments VV-100 to VV-101.)</p> <p>- Cal-Am Comments VV-100 to VV-101 expressed concern that the Draft SEIR and specifically Draft SEIR Appendix I (Schaaf & Wheeler 2019 memorandum evaluating source water availability) only evaluated a single year of drought.</p> <p>- Responses to Comments VV-100 to VV-101 do not respond to this concern. Instead, these responses assert that prolonged drought conditions were evaluated. This is inaccurate. The Draft SEIR Appendix I conducted its evaluation of municipal wastewater based on the average of years 2009-2013 for treated municipal wastewater, which only included one drought year. (Draft SEIR Appendix I, p. 5.) This analysis is deficient because the CEQA Guidelines require the Draft SEIR to evaluate if there is sufficient water available for reasonably foreseeable future development in normal, dry and multiple dry years. (CEQA Guidelines, Appx. G, § XIX(b).) The Final SEIR response ignores this requirement and Cal-Am’s comments. Further, Appendix M assumes that there will be adequate water supply during drought years because the Expansion will build a “drought reserve” during normal/wet years. (Appendix M, p. 9.) However, Appendix M fails to explain how this process of “banking” excess supply will occur or how much would be stored in a given normal/wet year. Moreover, it is unclear whether the banked reserve would be adequate for the Expansion under a multi-year drought or a multi-year severe drought, as is common in California. Thus, the Final SEIR fails to adequately evaluate and disclose potential water supply impacts, and the response is inadequate and does not satisfy the requirements of CEQA Guidelines</p>	<p>The CEQA Guidelines section in this comment is applicable to a development project that creates new demand for water supplies. In this case, the Proposed Modifications would create a water supply that can be injected in the groundwater basin and saved from one year to the next. Thus, water produced during wet and normal years can physically be available for use during dry or drought years. Multiple drought years could thus be accommodated. The analysis in the SEIR provides the information needed by the public to understand the environmental impacts of the Proposed Modifications on water supply and wastewater systems; no additional information is necessary to clarify the information already presented.</p>	<p>In concluding the Expansion can meet demand, the Final SEIR unrealistically assumes that ASR will provide 1,300 AFY of supply at all times and that no droughts will occur between now and 2034. The assumption that ASR can reliably produce 1,300 AFY on a consistent multi-year basis is unreasonable, speculative and unsupported. (Ex. B, Section IV.O.2.) First, as shown in the August 11, 2020 Hazen & Sawyer Memo, ASR using excess Carmel River water in the past 15 years has only achieved an output of 1,300 AFY once and an input of 1,300 AFY twice. (Ex.A, Exhibit 1, p. 5.) Second, during droughts, injection and recovery from ASR is essentially unavailable. (Ex. C, Section J.3.) Third, ASR has proven to be incapable of building up a drought reserve to consistently deliver 1,300 AFY. For the last 15 years, average annual storage of ASR is approximately 138 AFY, and the last five years have seen an average of 352 AFY. (Ex. A, Exhibit 1, p. 5.) Indeed, last year only 66 AF were added to ASR. Such amounts are insufficient to provide 1,300 AFY over a multi-year drought. Hazen & Sawyer accounted for the overall variability of ASR and showed that when realistic assumptions regarding ASR availability are made, there is an overall supply deficit ranging from -211 AFY to -861 AFY. (Ex. A, Exhibit 3, p. 13.)</p> <p>The Final SEIR’s evaluation of drought conditions has not changed and remains deficient. Appendix M continues to assume that there will be adequate water supply during drought years because the Expansion will build a “drought reserve” during normal/wet years. (Appendix M, p. 9.) This is inaccurate.</p>

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

	Cal-Am Comment in Letter Dated 4/24/2020	M1W Staff Response	Cal-Am Response
	Section 15088 to provide a response to the significant environmental points raised.		<p>The Final SEIR does not account for the risks of using wastewater as a primary water source for the Expansion—wastewater is subject to significant variability according to demand and drought conditions. (Ex. A, Exhibit 1, pp. 6-7.) Appendix I fails to account for WWTP flows since 2013, or the fact that WWTP flows have been decreasing on the Monterey Peninsula, and thereby overstates available wastewater flows that may be used as source water. (<i>Id.</i>, p. 7.)</p> <p>Under a corrected WWTP flow analysis using this new information, there would be significantly depressed WWTP source water supplies for the Expansion in Normal/Wet years, and no flow available for the PWM/GWR Project and Expansion during Dry years. (Ex. A, Exhibit 3, p. 6.) Moreover, because the Expansion would not have sufficient source water supply, M1W will have to choose between supplying source water for the Expansion or for the CSIP system. (See Cal-Am Response #19; Ex. A, Exhibit 2, pp. 13-14.) Without sufficient source water to supply CSIP, seawater intrusion in the Salinas Valley Groundwater Basin will continue to progress, disproportionately affecting the residents of the disadvantaged community of Castroville.</p> <p>This significant new information regarding wastewater flow data post-2013 requires recirculation of the Expansion Final SEIR for renewed notice and comment. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; <i>Cadiz Land Co.</i>, <i>supra</i>, 83 Cal.App.4th at p. 95.)</p>
46	<p>M. Water Supply and Waste Water Systems (4th major bullet). The Final SEIR does not provide an accessible summary of the quantity of water expected to be generated from each analyzed source. (Responses to Comments VV-102 to VV-105.)</p> <p>- Cal-Am Comments VV-102 to VV-105, explained that the Draft SEIR failed to identify the quantity of water expected to be obtained from each water source or where such information can be found. Cal-Am explained that this information is necessary for M1W to demonstrate how available source water</p>	M1W's right to the treated wastewater from the RTP is provided by California Water Code 1210. Several agreements have granted rights to this secondary effluent to others. These issues, the basis, methodology and assumptions for the analysis are described in the SEIR. MR #3 (Chapter 3, section 3.3 of the Final SEIR) and Appendix M of the Final SEIR describe how the secondary effluent used for the Proposed Modifications could be increased given the existence of substantial M1W rights to this water.	<p>As Cal-Am has routinely explained, the water rights that M1W claims are available for the Expansion in the Final SEIR Appendix M are not permanent water rights, but instead are merely interruptible use entitlements, and many of those entitlements are disputed by the holders of the water rights. (Ex. D, Section I.2.a; Ex. A, Exhibit 6.)</p> <p>As discussed above, the Analysis of Expansion Source Water Deficiencies in Response to Comments from Robert B. Holden provides a detailed analysis of each of the fourteen Expansion</p>

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	<p>is sufficient for the Expansion and the already approved PWM/GWR Project to meet their maximum outputs.</p> <p>- Responses to Comments VV-102 to VV-105 do not respond to this concern. Rather than provide the public with clarity as to the constituent quantities of source water availability, the Final SEIR frustrates public review of the Expansion by once again altering the water supply estimates provided. For example, estimated Reclamation Ditch water available to the Expansion decreased from 1,014 afy in the Draft SEIR to 808 afy in the Final SEIR as a result of a conflicting estimate provided in Appendix M. Additionally, the quantity of secondary effluent source water relied upon has dramatically increased since the Draft SEIR was published. More concerning, the Final SEIR now relies on 5,811 afy of secondary effluent, in direct contrast to the 2,854 afy contemplated in Appendix I of the Draft SEIR. (Compare Final SEIR, p. 777 [Appendix M, Table 2] with Draft SEIR Appendix I, Table 8.) M1W has not explained how or why this increase has occurred.</p> <p>This critical information was not subject to public review and comment and should be recirculated and evaluated to determine if potential significant environmental impacts may occur. The CEQA Guidelines require a lead agency to recirculate an EIR when significant new information is added prior to certification of the final EIR. (CEQA Guidelines, § 15088.5, subd. (a).) The CEQA Guidelines mandate recirculation when significant information is disclosed that makes the draft EIR “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (Id.) By once again altering the sources and supplies purportedly available to the Expansion, M1W has precluded meaningful public review and comment. (<i>Save Our Peninsula Comm., supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)</p>	<p>It is a policy decision of the Board to determine how they would like to use these rights. M1W staff and consultants have prepared the SEIR to ensure that the environmental impacts have been adequately described in the SEIR to provide the public meaningful information on which to base their comments and decisions.</p>	<p>water sources identified in the Final SEIR. (Ex. A, Exhibit 4.) This analysis reveals that Appendix M relies on inflated/outdated wastewater flows, misrepresents the amount of water that will be needed for the PWM/GWR Project and the RUWAP, and ignores the fact that water rights under the ARWRA are not actually available for the Expansion. (<i>Ibid.</i>)</p> <p>The analysis demonstrates that even under the most conservative estimates, the fourteen source waters analyzed in Appendix M can realistically only supply the Expansion with 1,971 to 2,158 AFY, at most. This is well short of the 2,778 AFY the Expansion requires to generate its 2,250 AFY. (Ex. A, Exhibit 4.)</p> <p>By failing to address the unreliability of the Expansion’s water sources, M1W has precluded meaningful public review and comment. (<i>Save Our Peninsula Comm., supra</i>, 87 Cal.App.4th at 131 [recirculation required when final EIR provided last-minute disclosure of information about the water rights for a project without opportunity for public review and comment].)</p>
	IV. OTHER CONSIDERATIONS		
47	<p>A. Growth Inducement (1st major bullet). Final SEIR continues to rely on MPWMD staff’s flawed supply and demand estimates in analyzing the Expansion’s growth inducing impacts and thereby fails to assess any potential for the Expansion to cause adverse growth impacts. (Responses to Comments VV-106 to VV-107.)</p>	<p>The Final SEIR presents a discussion of the potential growth that could be induced by the Proposed Modifications based both upon the evidence that the CPUC considered when it approved the MPWSP and the additional evidence that the Water Management District gathered and presented in its Supply and</p>	<p>M1W staff asserts that substantial evidence supports the Final SEIR’s conclusions, the Final SEIR is not insulated simply because it relies on a purported expert report. Rather, an expert opinion must be “supported by fact,” and as Cal-Am and other commenters have repeatedly demonstrated, the Final SEIR relies on outdated and improper estimates to assess the Expansion’s</p>

Attachment A: Cal-Am Responses to M1W Staff Responses to Cal-Am's PWM Expansion SEIR Comments

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	<p>- Cal-Am Comments VV-106 to VV-107 raised concerns regarding the Draft SEIR's reliance on the Initial Stoldt Memo in assessing the Expansion's potential for inducing significant population growth on the Monterey Peninsula. Cal-Am noted that both MPWMD staff's demand estimates and the Draft SEIR's reliance on those estimates were wholly unsupported, and therefore the Initial Stoldt Memo could not constitute substantial evidence for purposes of analyzing growth inducement impacts. As such, Comment VV-107 requested that the SEIR's growth inducement analysis be revised to remove any reliance on MPWMD staff's estimates.</p> <p>- Final SEIR Responses to Comments VV-106 to VV-107 fail to address the flaws in population growth estimates from MPWMD staff, and simply state that as a CEQA lead agency, M1W "can choose to rely on facts, data, and analysis provided by experts. . . ." The Final SEIR makes no attempt to provide additional substantial evidence in support of its population growth assessment, but instead refers back to Master Response #3, the Updated Stoldt Memo at Appendix O that was not available to the public during the comment period, and an MPWMD response to Hazen & Sawyer at Appendix N. Master Response #3 does not respond to the numerous flaws in MPWMD staff's estimates that are raised by various commenters, but instead dismisses these flaws as "differences of opinion." The Final SEIR's analysis of growth inducing impacts continues to improperly rely on Mr. Stoldt's estimates, which are not supported by substantial evidence, and the response also does not satisfy the requirements of CEQA Guidelines Section 15088. Moreover, as explained by Cal-Am and other commenters, the unrealistic and inaccurate analysis by MPWMD underestimates current and future demand for water on the Monterey Peninsula. Should population growth and resulting future demand exceed the projections put forward by MPWMD staff and adopted by the SEIR, the Expansion would not produce sufficient water to satisfy demand, and would harm Peninsula cities by actually inhibiting planned growth. (See Section III.L, supra.) Reliance on Mr. Stoldt's inaccurate estimates therefore results in an undisclosed impact related to population growth that the SEIR fails to analyze, requiring recirculation. (CEQA Guidelines, § 15088.5, subd. (a).)</p>	<p>Demand Memorandum. To be conservative, the Final SEIR discloses that, under the Water Management District's analysis, the Proposed Modifications could induce the same amount of growth as the MPWSP. This ensures that the full impact, based upon the evidence in the record, has been disclosed in the Final SEIR. The recent revisions to the Water Management District's Supply and Demand Report do not change any of the conclusions in the Draft SEIR, and therefore do not trigger a requirement to recirculate the Draft SEIR for additional public review and comment. The Water Management District's revisions, along with the responses to the Hazen and Sawyer document, are responsive to many of the comments that CalAm and its consultants provided on the initial version of the Supply and Demand Report. The Water Management District's Supply and Demand Report provides the factual basis for its conclusions, and constitutes a report prepared by an expert in the field. Therefore, it meets CEQA's definition of substantial evidence. The Proposed Modifications are proposed as a backup to the MPWSP not as a project to displace the MPWSP. If the Proposed Modifications are needed due to a delay in implementing the MPWSP, the Proposed Modifications would augment the regional water supply.</p>	<p>potential impacts on population growth. (Pub. Resources Code § 21080, subd. (e)(1).) And, again, while continuing to rely on this improper and outdated analysis, M1W staff does not address head-on the credible expert opinions offered by Cal-Am and other commenters.</p> <p>Further, not all of the information and analysis in the Final SEIR regarding growth inducement was provided for public review. Although M1W staff asserts this information was merely responding to comments, it contains significant updates pertaining to the Final SEIR's estimates, and the public must have a chance to adequately obtain and review this technical information. (<i>Save Our Peninsula Committee, supra</i>, (2001) 87 Cal.App.4th 99, 130.)</p> <p>Finally, as discussed more fully below, although M1W staff asserts that the Final SEIR took a conservative approach under the Water Management District's analysis by disclosing that the Expansion could induce the same growth as the MPWSP, it still fails to consider the possible growth that could occur as a result of the cumulative impact of the two projects operating simultaneously. (<i>Los Angeles Unified School Dist. v. City of Los Angeles</i> (1997) 58 Cal.App.4th 1019, 1025 ["Assessment of a project's cumulative impact on the environment is a critical aspect of the EIR."].)</p>
48	<p>A. Growth Inducement (2nd major bullet). Final SEIR fails to analyze the Expansion as a cumulative project with the MPWSP with respect to growth inducing impacts. (Responses to Comments VV-108 to VV-109.)</p>	<p>The Proposed Modifications potentially could be implemented in short-succession with the MPWSP. This is consistent with the cumulative impacts and growth inducement analyses in the SEIR. The growth</p>	<p>Although M1W staff's response admits that the Expansion could be implemented in short-succession with the MPWSP, it still does not engage in an appropriate cumulative impact analysis. As Cal-Am has previously stated, it is reasonably foreseeable that after</p>

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	<p>- Cal-Am Comments VV-108 to VV-109 requested that the SEIR be revised to assess the cumulative growth inducing effects resulting from the concurrent operation of the Expansion and the MPWSP. Because the Expansion could be implemented simultaneously with, or in short succession of, the MPWSP, an increase in water supply from the Expansion combined with water supplied by the MPWSP would result in cumulative population growth effects beyond those analyzed in the Draft SEIR. As such, CEQA requires the SEIR to analyze the cumulative growth inducing impacts of the Expansion. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).)</p> <p>- Final SEIR Responses to Comments VV-108 to VV-109 do not respond directly to Cal-Am’s concerns, but refer back to Master Response #4 regarding the adequacy of the SEIR’s cumulative impacts analysis. The Final SEIR also maintains that the Expansion is not an alternative water supply to the MPWSP— therefore, the Expansion must be considered a cumulative project implemented simultaneously with the MPWSP and must be analyzed as such. While Final SEIR Master Response #4 asserts that the Expansion “is not expected” to operate concurrently with the MPWSP, it would be unreasonable to expend significant funds on development of the Expansion, only to mothball that water supply when the MPWSP comes online. CEQA requires the analysis of reasonably foreseeable environmental consequences (CEQA Guidelines, § 15126; Laurel Heights, supra, 47 Cal.3d at 396), and it is reasonably foreseeable that the Expansion would not be mothballed given that it would provide a water supply to a region where water resources are scarce. Therefore, the SEIR must evaluate the impacts of that increase in supply in addition to any potential growth impacts caused by the MPWSP. (See CEQA Guidelines, § 15130, subd. (b)(1)(A).) The Final SEIR attempts to avoid a complete analysis of the Expansion’s growth inducing impacts by unreasonably arguing that the Expansion is not a cumulative project with the MPWSP. (See Section I, supra.)</p>	<p>inducement analysis assumes that the Proposed Modifications could accommodate the long-term growth projections for the region. If the MPSWP is implemented, the MPSWP would replace the expansion water provided by the Proposed Modifications and accommodate the total amount of projected growth. Because the MPSWP and the Proposed Modifications would not operate simultaneously, there would be no cumulative impacts associated with changes at the M1W outfall or injection into the Seaside Groundwater Basin. Per the direction of the M1W Board of Directors, the Proposed Modifications are evaluated as a backup to the MPSWP. The SEIR assumes, as it must, that the Proposed Modifications could be implemented over a long period. This could occur, for example, if the MPSWP does not receive the necessary regulatory approvals for its construction and implementation. It is also possible that the Proposed Modifications could be operated for a shorter period. Before entering into a Water Supply Agreement or other financial arrangement, the M1W Board of Directors would consider the information before it as to the likely time period that the Proposed Modifications would be needed, the expected capital and operational expenditures, and the financial feasibility of moving forward with the project. The SEIR is not intended to be the sole source of information that the Board considers in determining the terms of financial arrangements. There are no known uses of the expanded water supplies that would be produced by the Proposed Modifications beyond use of those supplies as a backup to the MPWSP. Without any known uses, it is not possible to analyze future uses of the Proposed Modifications other than as a backup to the MPSWP and CEQA does not require such speculation.</p>	<p>expending the time and resources to build the Expansion, the Expansion would be used in conjunction with the MPWSP. Once again, M1W staff summarily concludes that the two projects would not operate simultaneously and that there are no known uses of expanded water supplies. But to assume that once the MPWSP is in operation that the Expansion would entirely cease to operate is unrealistic and not practical in a region with a desperate need of water and pent up demand for growth. This reasonable conclusion is supported by the fact that M1W has consistently said that the Expansion will not be an alternative to the MPWSP—if not an alternative, then the cumulative impacts in their entirety must be considered.</p> <p>By ignoring this reasonably foreseeable situation—where both MPWSP and the Expansion operate simultaneously—the Final SEIR and M1W staff continue to skirt addressing any cumulative impacts that such an increase in water supply would have on population growth. This renders the Final SEIR an improper informational document. (CEQA Guidelines, § 15126; <i>Laurel Heights, supra</i>, 47 Cal.3d at 396; <i>Save Our Carmel River v. Monterey Peninsula Water Management District</i> (2006) 141 Cal.App.4th 677, 704 [cumulative impact analysis requires agency to consider changes in the environment resulting from <i>reasonably foreseeable probable future projects</i>].) The Final SEIR needs to address in full the Expansion’s growth inducing impacts. (CEQA Guidelines, § 15144 [“While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can”].)</p>

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49	B. Alternatives. See Section I, <i>supra</i> , for a discussion of the Final SEIR's failure to evaluate the MPWSP as a water supply project alternative to the Expansion. (Responses to Comments VV-110 to VV-115.)	Under CEQA, an alternative must be capable of substantially reducing one or more of the significant environmental effects of the proposed project. The MPSWP would not reduce the significant environmental effects of the Proposed Modifications, and therefore does not meet CEQA's definition of an alternative.	The SEIR must analyze a cumulative scenario in which both the Expansion and the MPWSP are operated simultaneously. See Cal-Am Response #10 above.
	V. RECIRCULATION		
50	The Draft SEIR was missing critical data and analysis of the Expansion's potential impacts as a standalone project, as well as impacts that may occur if the Expansion and the MPWSP are developed cumulatively. Appendix M has dramatically increased the quantity of secondary effluent source water relied upon by the Expansion from what was contemplated in the Draft SEIR, and has not explained how or why this change occurred. This critical information was not subject to public review and comment. By including last minute information about new water rights and sources purportedly available to the Expansion, M1W has rendered the Draft SEIR substantively inadequate and deprived the public of meaningful review and comment. (CEQA Guidelines § 15088.5; <i>Save Our Peninsula Comm.</i> , <i>supra</i> , 87 Cal.App.4th at 131.) The SEIR must be revised and recirculated for additional comment in order to address this significant deficiency, as well as the numerous deficiencies identified above. (CEQA Guidelines § 15088.5.)	Additional information that has been added to the SEIR is responsive to the comments and questions that have been received. The addition of information does not trigger recirculation unless the new information indicates that a new or substantially more severe significant impact would result from the project or a feasible alternative or mitigation measure considerably different from those that were evaluated would lessen the environmental impacts of the project. The additional source water information does not change any of the Draft SEIR's conclusions as to the significant impacts of the Proposed Modifications, nor does the information indicate that a new or different project alternative or mitigation measure would lessen the impacts of the Proposed Modifications. Because the additional information does not materially affect the SEIR's impact analysis, mitigation measures or alternatives, the information does not indicate that the document was fundamentally and basically inadequate. Rather, the additional information augments an already adequate SEIR by providing a further analysis of source water supplies based upon updated data.	M1W asserts that any added information in response to the SEIR is not significant. This is incorrect; further, it does not make up for lack of analysis in the SEIR. For example, the Final SEIR fails to evaluate impacts that may occur as a result of the Project failing to have an adequate water supply to meet even the lowest demand projections for the Peninsula. The Final SEIR also fails to consider the impacts that may occur as a result of decreased flows available to the CSIP and the potential for seawater intrusion in the Seaside Groundwater Basin. This continued failure to include an updated analysis renders the Final SEIR deficient and deprives the public of an adequate informational document for the Project. (<i>See Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.</i> (2001) 91 Cal.App.4th 1344, 1382 ["CEQA requires that the [agency] and the inquiring public obtain the technical information needed"].) The Final SEIR must be recirculated to address the deficiencies identified. (<i>Save Our Peninsula Committee, supra</i> , 87 Cal.App.4th at 130 ["If, subsequent to the period of public and interagency review, the lead agency adds 'significant new information' to an EIR, the agency must issue new notice and must 'recirculate' the revised EIR, or portions thereof, for additional commentary and consultation."].)
	THE EXPANSION IS NOT ENOUGH TO LIFT THE CDO		
51	The Final SEIR errs in relying on MPWMD staff's supply and demand conclusions that "[1] the Proposed Modifications can meet the long-term needs of the Monterey Peninsula; [and] [2] the Proposed Modifications would be sufficient to lift the State Water Board Cease and Desist Order." (Final SEIR,	The SEIR is intended to provide information to the public and decision-makers regarding the effects that the Proposed Modifications would have on the physical environment. The decision by the State	Cal-Am remains concerned with the Expansion's ability to deliver sufficient water to meet the Peninsula's water demands and lift the CDO. Even if Expansion product water is part of Cal-Am's water supply portfolio, Cal-Am will still need additional water supplies

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	<p>p. 3-7.) These conclusions are inconsistent with the findings, decisions, and standards of the regulatory agencies with subject matter jurisdiction over the issues—the CPUC and SWRCB. Cal-Am remains concerned that the Expansion will not supply enough water to meet the needs of the Monterey Peninsula to allow lifting of the CDO. The CPUC, as part of its extensive review and approval of the MPWSP, specifically addressed the water demand projections for the Monterey Peninsula. The CPUC had “a considerable record” of the numerous parties’ water demand projections for the Monterey Peninsula. (See CPUC Dec. 18-09-017, § 4.2.1, p. 24; See also id. at pp. 24-33.) The CPUC also reviewed and assessed the water supply available to Cal-Am to serve the Monterey Peninsula, including information relating to the Expansion, and concluded that even if the Expansion were considered a source of supply for Cal-Am, Cal-Am would still have a water supply deficit. (Id. at § 4.3, pp. 40-42.) Thus, the Expansion alone is insufficient to meet the Peninsula’s long-term water demands. Finally, Cal-Am has substantial concerns that the Expansion’s water supply will be insufficient to allow for lifting of the CDO. In order for the CDO to be lifted: (1) Cal-Am must certify to the SWRCB, “with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River;” and (2) the SWRCB’s Deputy Director of Water Rights must concur with Cal-Am’s certification. (SWRCB Order 2016-016, Condition 15 at p. 27.) Cal-Am has expressed its significant concerns and disagreement with the supply and demand analysis relied upon by M1W, and those concerns have not been addressed. Moreover, insufficient evidence has been provided concerning the ability of the Expansion to act as a permanent supply of water. Cal-Am is also concerned that any reliance on the Expansion to replace Carmel River diversions may violate the California Safe Drinking Water Act. Health and Safety Code section 116555 requires that “[a]ny person who owns a public water system shall ensure that the system . . . [p]rovides a reliable and adequate supply” of water. (H&S Code, § 116555(a)(3) [emphasis added].) And if any of the Expansion’s source waters are not available on a permanent and adequate basis, there is an even greater risk that the Expansion will not be able to provide an adequate and reliable water supply sufficient to remove the CDO and satisfy Health and Safety Code section 116555.</p>	<p>Water Board as to whether to lift the CDO is a quasi-adjudicatory decision that would be made based upon the full record presented to the State Water Board, which likely would include updated information regarding regional water supply and demand as well as updated information as to the status of the MPSWP. Substantial evidence in the record indicates that Proposed Modifications physically would be capable of supplying enough water to lift the CDO; however, it is not the role of the SEIR to determine whether the State Water Board ultimately would do so.</p>	<p>because the Expansion is neither an adequate nor a permanent water supply sufficient to meet the Peninsula’s needs. Based on the predictions set forth in the Revised SEIR, the Expansion could only meet Peninsula demand for a maximum of three years, after which the Peninsula would be without excess water supply to accommodate regional housing growth. This does not satisfy the SEIR’s stated primary objective of the Expansion “be[ing] capable of commencing operation, or of being substantially complete, by the end of 2021 or as necessary to meet CalAm’s replacement water needs.” (Draft SEIR, p. 2-9; see also Final SEIR, p. 3-35.)</p>

Index of Exhibits

Exhibit	Description
A.	Exhibit M to Cal-Am's CDP application, which includes an abundance of technical analysis, including multiple reports from Hazen & Sawyer
B.	Excerpts from Applicant's Staff Report, dated August 25, 2020
C.	Excerpts of Cal-Am's Response to CCC Staff Report, dated August 25, 2020
D.	Response to MCWD
E.	M1W Letter to CCC re Response to Requests for Clarification, dated August 20, 2020
F.	Seaside Groundwater Basin Watermaster Letter to Commission, dated August 12, 2020
G.	Seaside Groundwater Basin 2020 Seawater Intrusion Analysis Report, dated November 19, 2020
H.	Seaside Groundwater Basin Watermaster Memo, dated December 2, 2020
I.	Letter from CalAm to M1W, dated May 9, 2020
J.	Natural Disaster Declaration from the USDA, dated March 5, 2021
K.	State of Emergency Proclamation from Governor Newsom, dated April 21, 2021

EXHIBIT A

EXHIBIT M

EXHIBIT M

Unsecured and Insufficient Source Waters for the Pure Water Monterey Expansion Project

As discussed below and in the exhibits enclosed herein, substantial evidence demonstrates the infeasibility of the Pure Water Monterey (“PWM”) Expansion and establishes that there is a significant shortfall of available source waters for the operation of both the original PWM project (“Phase 1 PWM”) and the PWM Expansion.

Exhibit 1 is an August 11, 2020, memorandum prepared by Hazen and Sawyer (“Hazen”) responding to the Final Supplemental EIR (“Final SEIR”) for the PWM Expansion dated April 2020. Exhibit 1 explains that the water supply and demand analysis conducted in the Final SEIR for the PWM Expansion is inaccurate and utilizes outdated flow information. Exhibit 1 finds that when the outdated flow information considered in the Final SEIR is updated based on projections from publicly available flow data from M1W and USGS, the Phase 1 PWM and the PWM Expansion cannot adequately meet even the lowest acre feet per year (“afy”) demand projected in the March 13, 2020 memorandum prepared by David Stoldt and relied upon in the Final SEIR.

On August 20, 2020, in response to the August 11 Hazen memorandum, M1W staff released wastewater flow information for 2014 to 2019 to the public for the first time. This data was not considered or analyzed in the Final SEIR for the PWM Expansion. **Exhibit 2** is an August 23, 2020 memorandum prepared by Hazen addressing the new wastewater flow numbers for 2014 to 2019. Exhibit 2 demonstrates that based on the newly released flow information, there would still be insufficient source waters for the PWM Expansion. Moreover, as discussed in the memorandum, the flow information belatedly released by M1W represents significant new information that should have been made available to the public, subjected to review and comment, and analyzed in the Final SEIR. (CEQA Guidelines, § 15088.5 [requiring recirculation of an EIR where significant new information arises].)

Exhibit 3 is a September 10, 2020 memorandum prepared by Hazen in response to the September 25, 2020 California Coastal Commission (“CCC”) Staff Report concerning Cal-Am’s Monterey Peninsula Water Supply Project (the “Project”). Exhibit 3 explains that when current data and wastewater trends are taken into account, along with the new wastewater flow information provided by M1W staff and actual surface water flows, the Phase 1 PWM and the PWM Expansion projects would not have sufficient source water to provide the Monterey Peninsula with an adequate water supply during both normal and dry years even under the lowest demand estimate of 10,855 acre-feet per year assumed by the Monterey Peninsula Water Management District. (See Exhibit 3, Appendix A: Identified Available Water Supplies In Acre-Feet Per Year [updated accounting of available water supplies].)

Exhibit 4 is a chart that responds to a September 11, 2020, letter to the Commission from Robert Holden, a former employee of M1W, regarding fourteen source waters purportedly available for the PWM Expansion. This chart evaluates these same fourteen sources based on analysis from Hazen & Sawyer and the most recent flow data from M1W and concludes that even under the most conservative estimates, the fourteen source waters analyzed cannot

realistically supply enough actual source water flows for both the Phase 1 PWM and PWM Expansion to achieve their planned outputs. Therefore, the Monterey Peninsula Water Management District's estimated demand of 10,855 acre-feet per year cannot be achieved.

Exhibit 5 is a September 11, 2020, letter from Monterey County Water Resources Agency ("MCWRA") to the CCC regarding the Project. It explains the previously assumed increase in wastewater flows in the region have declined in recent years and that the PWM Expansion's source waters have not been sufficiently quantified.

Exhibit 6 is an April 27, 2020, letter from the City of Salinas to the M1W Board of Directors regarding the use of Agriculture Produce Wash Water for the PWM Expansion. Specifically, it notes that the Final SEIR for the PWM Expansion failed to address serious concerns regarding the use of agricultural wash water and explains that the 2015 Conveyance and Treatment Agreement between Salinas and M1W only allows agricultural wash water to be used for the Phase 1 PWM, and not for the proposed PWM Expansion. Exhibit 6 also confirms that the Amended and Restated Water Recycling Agreement between MCWRA and M1W does not contemplate the use of agricultural produce wash water for the PWM Expansion.

Exhibit 7 is the Final Minutes from April 27, 2020 M1W Board of Directors Meeting, where a motion was made by a M1W Board member "to approve Resolution 2020-07, a resolution (1) Certifying the Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project[.]" (Exhibit 7, pp. 16-17.) That motion failed. Although the M1W Board declined to permanently terminate the PWM Expansion project (*id.* at 17), certification of the Final SEIR for the PWM Expansion was rejected.

For the reasons summarized above and in the exhibits herein, the PWM Expansion cannot provide an adequate and reliable water supply sufficient to satisfy the requirements for lifting the State Water Board's Cease and Desist Order.

EXHIBIT 1

California American Water

Peer Review of Supply and Demand for Water on the Monterey Peninsula

Prepared By: Kevin Alexander, P.E.

Reviewed By: Cindy L. Miller, P.E.; Jack Kiefer, PhD, Greg Gates, P.E., Luke Wang, P.E.
Hazen and Sawyer - August 11, 2020

This memorandum is in response to the following:

- Monterey Peninsula Water Management District (MPWMD), Exhibit 4-A Supply and Demand for Water on the Monterey Peninsula dated March 13, 2020 prepared by David J. Stoldt, General Manager;
- Exhibit 4-B Marina Coast Water District Demand (MCWD) Study by WaterDM dated April 21, 2020;
- Final Supplemental EIR for the PWM Expansion dated April 2020; and
- WaterDM Supplemental Study dated June 24, 2020.

California American Water Company (CalAm) is responsible for ensuring the Monterey Peninsula's available water supply is adequate to meet demand not just under ideal circumstances, but particularly under any number of adverse conditions that have some probability of occurrence.

There is no dispute that the Monterey Peninsula Water Supply Project (MPWSP) will provide a supply required to meet the demand of the Monterey Peninsula. The MPWSP is the only solution that meets the stated goals of Governor Newsom's 2020 [Water Resilience Portfolio](#) of: diverse water supplies, protect and enhance natural ecosystems, build connections and be prepared¹.



PHOTOS: USGS (TOP), HAZEN AND SAWYER (ABOVE)



MPWMD's General Manager is asking CalAm to utilize recycled water with sources that are vulnerable to drought, climate change, and water quality challenges. CalAm is asking for consideration of the MPWSP as a means to address those concerns and to address vulnerable supply issues for the entire region.

Considering the Ocean as a safe, secure, reliable, and resilient source as part of the Monterey Peninsula water supply portfolio is critical to solving the region's water supply.

- Since 2001, 13 dry years and 4 critically dry years have affected the Peninsula's water supplies.
- Agricultural flows are diminished by a third when compared to past years.²
- Water demands are down and that is reducing municipal wastewater flows available for water recycling.³

The Pure Water Monterey(PWM) Expansion project as proposed by Monterey One Water (M1W) is intended to provide additional water supply, but fails to provide the reliability, resiliency and supply diversity needed to meet demand on the Monterey Peninsula under multiple probable adverse scenarios including demand variability, wastewater flow variability, and surface water supply limitations as discussed further in this memorandum.

In contrast, the resiliency and certainty of the MPWSP facility provides the ability to meet uncertain demands across multiple probable adverse scenarios, flexibility to manage supply to protect the environment, and enough water to support stated goals of safe, secure, reliable and resilient water for the Peninsula at all times.

Phase One of the Pure Water Monterey Groundwater Replenishment Project (PWM Phase One) is intended to provide up to 3,500 acre-feet per year of recycled water as a valuable part of the Peninsula's supply portfolio, but expanding the facility with the PWM Expansion means more reliance on an uncertain water source and creates an imbalance in the Peninsula's supply portfolio. Such heavy reliance on one source means more scrutiny must be placed on assessing the risks of the supply.

Only the Monterey Peninsula Water Supply Project provides a source that can meet the objectives of a reliable and adequate potable water supply for the Monterey Peninsula.

Water Resource Management

CalAm is responsible for assessing the ability of water supplies to meet the demands of the community and the environment in Monterey. With that responsibility comes a need to identify potential risks to its customers' water supplies and the need to develop plans and supplies resilient to those risks. CalAm has developed the MPWSP to accomplish these objectives, ensuring the ability to protect public health and the environment on the Peninsula for the foreseeable future.

CalAm Considers Water Supplies Through Supply Reliability, Diversification, Data, and Dry Year Resiliency.

Supply Reliability – Water agencies throughout the world consider water supply reliability when developing water supply plans to account for known and unknown risks. California Water Code 10635(a) requires water suppliers to assess the reliability of supplies. Of the proposed supply projects for the Peninsula, only the MPWSP fully accounts for water supply reliability to protect the Peninsula from adverse supply conditions.

Diversification – Diversification is a foundational strategy for minimizing the risks to any kind of water supply portfolio. Even California Water Code section 10608(c) declares that diverse supply portfolios will increase supply reliability. Governor Newsom’s 2020 Water Resilience Portfolio includes diversification as the first approach to address climate change in the state’s water supply systems and explains that diversification “will strengthen water security and reduce pressure on river systems across the state.” (Portfolio, at p. 5.) The Governor explains that local and regional entities “must reduce reliance on any one source and diversify supplies to enable flexibility as conditions change.” (Portfolio, p. 17.) The MPWSP increases the diversity of the Peninsula’s water portfolio by introducing a new source of raw water and reduces risk,

as opposed to the PWM Phase One and the PWM Expansion, which rely on the availability of effluent treated at a centralized recycling facility to generate 51% of total supply available to CalAm’s Customers.

Data – Analysis of proposed water sources and demands over the same time period is important to account for impacts such as financial downturns, drought, water restrictions, tiered rates, regulatory changes and population considerations. The MPWMD Supply and Demand Report fails to fully account for historical data and thus fails to tell a complete story by using only the past 3 or 5 years of demand data, while simultaneously using a different time range (2009-2013) for other sources. Informed decisions based on a complete picture of supply and demand and concrete data from the historic and available record can and should be made together and in the best interest of the Peninsula.

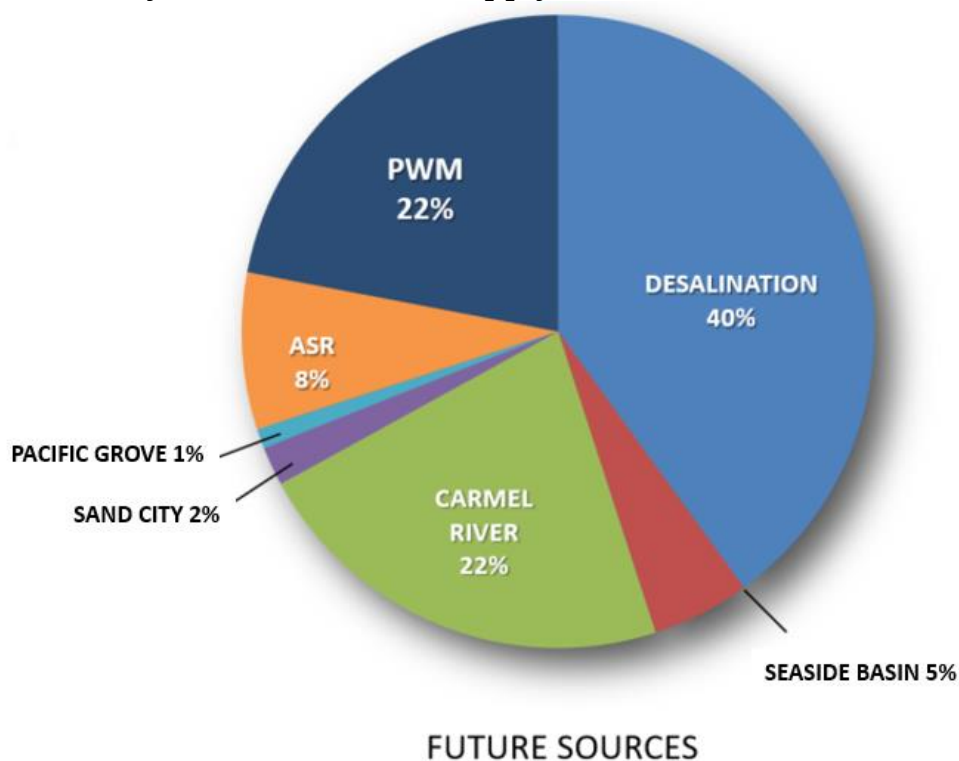
Dry Year Resiliency – Throughout an increasing percentage of the world, the western United States, and certainly California, planning for a very dry year (and a succession of dry years) is a key element to water supply planning as required by the California Water Code. The source water for the MPWSP, the Pacific Ocean, is not vulnerable to drought – and the regulatory conservation that often accompanies it – unlike the source water for PWM Phase One and the PWM Expansion. Governor Newsom’s 2020 Water Resilience Portfolio specifically notes that water suppliers need to plan for deeper droughts and “develop strategies to protect communities and fish and wildlife in the event of a drought lasting at least six years. (p. 25) Only the MPWSP provides for such dry year resiliency. (Portfolio, pp. 25-26.)

Water Supply to Meet Demand

CalAm is responsible for meeting the requirements of the California Water Code for Urban Water Management Planning, which requires the assessment of the reliability of water service under multiple scenarios (normal, dry, and multiple dry years, including a repeat of the 5 consecutive historic driest years) and consideration of the reliability of water service given the combination of supplies available to it. (See Water Code §10635.) If PWM Phase One and the PWM Expansion are considered key sources of supply for the Peninsula, then the Peninsula is required to rely on production from PWM Phase One and PWM Expansion and ASR at all times to barely achieve normal year demands. Accepting the PWM Expansion as a key supply does not line up with informed and thorough engineering practices for water supply planning required by the California Water Code. (Water Code §§ 10610 *et seq.*) Figure 1 below illustrates why a diverse and balanced portfolio of water supplies is required for the Peninsula to meet the range of water demands including low optimistic demand values to the higher and more conservative demand values.

The only solution that addresses the water supply issue in a way that provides appropriate supply reliability on the Peninsula is the MPWSP. As depicted in Figure 1 below, coupled with the existing PWM Phase One and other existing sources, the MPWSP provides a robust and diversified portfolio of water supplies to address known and probable challenges such as prolonged drought conditions, limited wastewater flows, limited PWM Phase One injection, limited agricultural drain flows, flows from the Sand City Desal and possible limited flows from Aquifer Storage and Recovery (ASR).

Figure 1: Monterey Peninsula Water Supply Portfolio Diversification



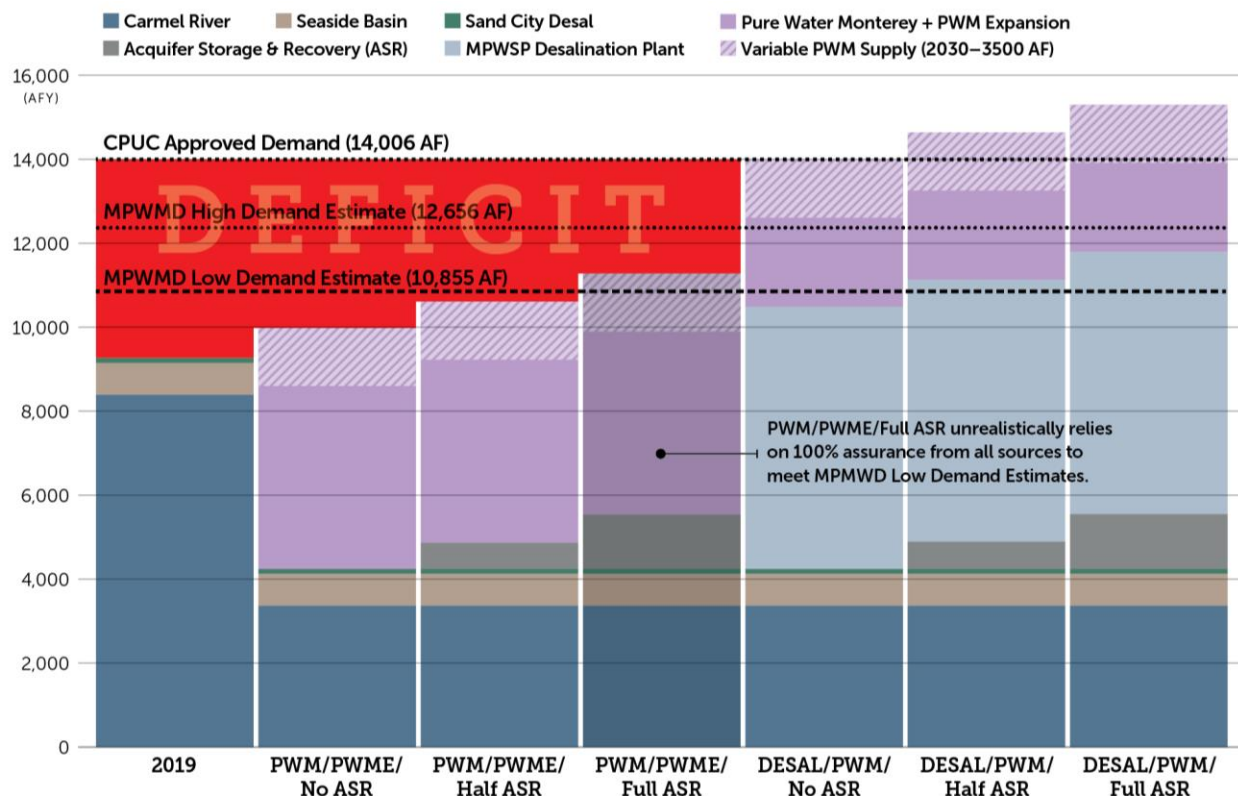
ASR build-up in particular has not been successfully demonstrated throughout the development and use of the ASR system over a 15-year period. As shown in Figure 6, included in the Appendix hereto, only once in the past 15 years has ASR achieved 1,300 AFY. As explained in Hazen’s prior memo, ASR water availability is reduced to 63% in a single dry year, and even further reduced to 4% following three dry years. Therefore, ASR does not meet Water Code reliability standards (5 consecutive historic driest years) or Governor Newsom’s 2020 Water Resilience Portfolio that requires consideration of a drought lasting six years.

Further, over the past 15 years, the average availability of ASR is approximately 138 AFY, far less than the 1,300 AFY assumed by MPWMD General Manager David Stoldt and WaterDM as available to meet water demand on the Peninsula. Even over the last five years, the average availability of ASR is 352 AFY, which again is far less than the 1,300 AFY assumed available by Stoldt and WaterDM. Analysis offered by Stoldt in September 2019 to the Coastal Commission and WaterDM relied on the full availability of ASR in order for the PWM Expansion to meet existing demand on the Peninsula, however, such analysis is based on the unrealistic assumption that no drought will take place between now and 2034. Such an assumption is contradicted by plain history—there has been a multi-year drought in California in virtually every decade since 1917—and as discussed above is inconsistent with applicable water planning regulations and guidance.

In addition, counting on ASR storage at 100% with limited knowledge of losses to the ocean and other basins imparts uncertainty in that supply as a continuous resource and drought mitigation strategy. In Figure 2 below, ASR volume is shown under three distinct scenarios to account for the limited volume stored over the past 15 years and these other uncertainties—No ASR, Half ASR and Full ASR. Notably, even the Half ASR scenario requires 650 AFY, which is almost double the average ASR availability over the past five years, and over five times the 15-year ASR average. When the variability of ASR is considered, the PWM Phase One and PWM Expansion do not meet the Peninsula’s minimum water demands. This is one of the reasons that the California Public Utilities Commission concluded that “only in conjunction with construction of a desalination plant of some size within five to fifteen years” would the PWM Expansion be capable of providing a “sufficient and reliable water supply” for the Peninsula. (See CPUC Decision D.18-09-017, Appx. C, p. C-71.)

Figure 2: Monterey Peninsula Water Supplies to Meet Demands Comparison of PWM Expansion and MPWSP with Variable ASR

MPWSP opponents claim that the MPWSP is not currently needed to meet existing demand projections. However, meeting even the lowest demand projections without the MPWSP requires full capacity operation of two other supplies that have yet to prove reliable and are vulnerable to high-probability risks.



Wastewater as a Source for PWM Phase One and PWM Expansion

Stoldt's characterization of the PWM Expansion as a project that can replace CalAm's existing water supplies and meet the long-term needs of the Peninsula also does not accurately and transparently account for the risks of having wastewater as a primary water supply that varies with demand and drought.^{4,5} As discussed below, publicly available evidence demonstrates that wastewater cannot be relied upon as a primary water source for the PWM Expansion, and additional reliable supplies would be needed to ensure that the PWM Phase One and PWM Expansion can supply water in the amounts those projects have promised/projected.

The MPMWD Supply and Demand Report and the Supplemental EIR for the PWM Expansion focus on demands being low and use the last 3, 5 and 10 years as the basis for revised demand assumptions in CalAm's service territory. (See MPMWD Supply and Demand Report page 8, Table 3.) MPMWD had WaterDM evaluate demands with recent data in an attempt to explain the differences in demands between estimates by CalAm and what has been observed on the Peninsula in the past 5 years.⁶

In contrast to MPMWD's and WaterDM's attempt to focus only on the most recent years to support their positions, Appendix I to the Supplemental EIR for the PWM Expansion asserts that the average wastewater treatment plant (WWTP) flows should be based on the period from 2009 to 2013 where WWTP flows were 21,764 AF, or a worse case flow of 20,090 AF based on the 2013 drought year.⁷ By failing to account for the most recent years since 2013, Appendix I substantially overstates the available wastewater flows that could potentially be used as source water for recycled water projects on the Peninsula.

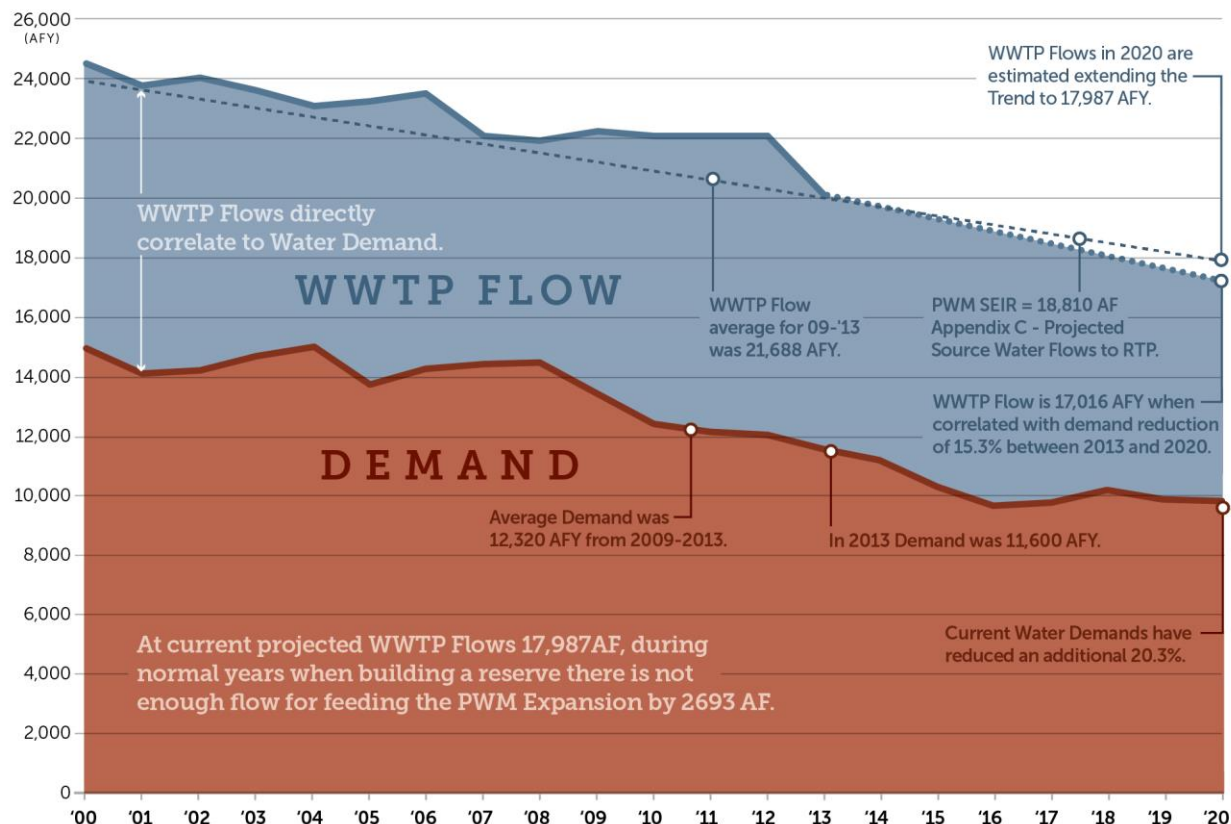
The approach taken in Appendix I ignores that WWTP flows correlate to water demand/use, which has continued to decrease on the Peninsula due to conservation and other factors. Based on available data, Figure 3 below depicts an overall downward trend in WWTP flows that is consistent with the observed decline in water demand on the Peninsula. The EIR from 2016 for PWM Phase One shows WWTP flows trending downward from approximately 25,000 AF in 2000 to approximately 20,000 AF in 2013.⁸ A separate appendix to the Supplemental EIR (Appendix E) shows further reduced WWTP flows to 18,810 AF (16.79 MGD).⁹ However, this number was not utilized in the Supplemental EIR to calculate available WWTP flows as source water for either PWM Phase One or PWM Expansion, which is a significant error.

Moreover, additional data collected by M1W and presented to its Ad-Hoc JPA Revision Committee on July 20, 2020, indicates that since the beginning of 2020 WWTP flows are yet again further reduced to 17,980 AF or 16.05 mgd, as specified in Exhibit 5.¹⁰

Figure 3 shows that the WWTP Flows correlate with demand reductions on the Peninsula. For example, as shown in Figure 3, since 2013 demand has declined 20.3% when compared to the average demand from 2009 to 2013. Additionally, 2013 drought year demand compared to current demand, represents a 15.3% reduction.¹¹ Calculating the WWTP flows over these same time periods using these respective reduction percentages (20.3% and 15.3%), a conservative estimate of current average WWTP flows is 17,296 AF to as low as 17,016 AF, respectively. An alternative method of determining today's WWTP flows based on a linear trend of the existing flow data indicates that current flows are 17,987 AF, as shown in Figure 3. All of these WWTP flow estimates, which are based on a more complete picture of recent data, are much lower than those used in the SEIR Appendix I - Tables 8 to 11. As result the SEIR substantially overstates the availability of WWTP flows available as source water available to PWM Phase One and the PWM Expansion.

Figure 3: Reduced Demand = Reduced WWTP Flow (=Reduced Recycled Water Supply)

Monterey Wastewater Flows shown in the SEIR Appendix I-Table 8,9,10 (Normal Yr) and Table 11(Dry Yr) use data from 2009-2013 which does not represent the current WWTP Flows. The graph below estimates current WWTP flows in 2020 based on demand correlation from MPWMD Supply and Demand Report-Fig 1.



SEIR Appendix I - Tables 8 to 11 have been updated in Table 1 below to reflect more realistic estimates of WWTP flows, along with minor reductions to Reclamation Ditch flows in the Surface Waters category based on the analysis provided in the next section of this memorandum demonstrating these flows also are expected to be reduced compared to amounts claimed in the SEIR. When realistic estimates of WWTP flows are utilized, it becomes clear, the MPMWD Supply and Demand Study and the SEIR failed to assess how reduced WWTP flows would adversely affect production of the PWM Phase One or the PWM Expansion. The following Table 1 provides a comparison of Supply and Demand from SEIR Appendix I - Tables 8 to 11 with updated WWTP flows and Reclamation Ditch flows to show the impact of these expected reductions on the water available to use for the CSIP, PWM Phase One, PWM Expansion, and the Regional Urban Water Augmentation Project (RUWAP). In all conditions there is a supply deficit.

TABLE 1 – IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 – 11 FROM SEIR APPX. I

Supply and Demand <i>in Acre-Ft</i>	Original SEIR Appx. I Data				Updated Appx. I Data			
	Table 8	Table 9	Table10	Table11	Table 8 Updated	Table 9 Updated	Table10 Updated	Table11 Updated
SUPPLY								
WWTP Flow ^a	21764	21764	21764	20090	17987	17987	17987	17016
Domestic Flows	82	82	82	82	82	82	82	82
New Sources ^b	2579	2579	2579	2430	2579	2579	2579	2430
Surface Water ^c	3721	2052	2041	2840	3641	1972	1961	2304
TOTAL	28146	26477	26466	25442	24289	22620	22609	21832
DEMAND								
CSIP and CSIP Well	17227	17227	17227	22619	17227	17227	17227	22619
PWM	4320	4320	4320	2963	4320	4320	4320	2963
PWM drought	248	248	0	0	248	248	0	0
PWM Expansion	2778	2778	2778	2778	2778	2778	2778	2778
RUWAP	741	741	741	741	741	741	741	741
TOTAL	25314	25314	25066	29101	25314	25314	25066	29102
Annual Supply Excess^d	2833	1164	1400	-3659	-1025	-2693	-2457	-7270

Notes:

- a Updated WWTP Flows based on Figure 2 Trends and calculated Dry Year from Demand Correlation
- B New sources from Table 8-11
- c Surface water updated by reducing Reclamation Ditch Values from USGS 10yr average.
- d Annual supply excess calculated from Supply minus Demand. A negative value means a supply deficit.

Table 2 represents a flow balance to compare SEIR Appendix I Tables 8 to 11 compared to updated Table 8 to 11 with updated WWTP flow and Reclamation Ditch waters from Figure 3. Based on the flow balance for the updated Normal/Wet Year when building a reserve “Table 9 Updated column” would allow for 84 Acre-Ft to be fed to the PWM Expansion. The available supply for the Dry Year, as shown in the “Table 11 Updated” column, demonstrates that there is no flow available for PWM Phase One and PWM Expansion during a dry year, and flow for RUWAP would have to be taken as a water right to serve those flows. All scenarios analyzed demonstrate that there is little to no WWTP flow available to PWM Expansion. As a result, PWM Expansion would not have sufficient source water to produce the promised supply of 2,250 AFY.

TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

Flow Balance – in Acre-Ft	Table 8	Table 9	Table 10	Table 11	Table 8 Update	Table 9 Update	Table 10 Update	Table 11 Update
Flow to CSIP + CSIP Well								
Pumping	17227	17227	17227	22619	17227	17227	17227	21091 ^e
Flow to PWM ^f	4320	4320	4320	2963	4320	4320	4320	0
Flow to PWM Drought	248	248	0	0	248	248	0	0
Flow to PWME ^g	2778	2778	2778	2778	1753	84	321	0
Flow to RUWAP	741	741	741	741	741	741	741	741
Actual Use Flows^h	25314	25314	25066	29101	24289	22620	22609	21832
Flow to ASR ⁱ	5950	5950	5750	4650	5120	3768	3759	0
Concentrate Flow to Outfall ^j	1536	1536	1489	1232	1342	1025	1023	141
Deficit To ASR	0	0	0	-1100	-830	-2182	-1991	-4651

Notes:

- e CSIP and CSIP Well Flows from Table 8-11 Demand. Reduced CSIP in "Table 11 Updated" by taking Water Right
- f Revised flow to PWM down for Table 11 to match actual Use to supply
- g Flow available to PWME is calculated based on maintaining flow to PWM and RUWAP and to Concentrate
- h Actual Use is calculated to confirm balance with Supply
- i ASR Flow is from the AWT product water flow without RUWAP
- j Concentrate flow is 19% of Flow for PWM, PWM Drought, PWME, and RUWAP
- k Deficit to ASR based on Flow to ASR minus the PWM AND PWME DEMAND from Table 1

The above analysis of the WWTP flows demonstrates the need for a very thorough and transparent analysis of the current WWTP flows and the impact to the reliability of PWM Phase One and PWM Expansion. At present, there appear to be significant limitations on the availability of source water from WWTP Flows for the PWM Expansion.

Surface Water Flow Analysis

As discussed above, another area that requires consideration is the flow available to the PWM Phase One and PWM Expansion from the proposed Surface Water supplies. The Reclamation Ditch flows were analyzed originally in the Schaaf & Wheeler Agricultural Ditch Yield Study, March 2015 based on 2006-2014 data, and were updated in the SEIR Appendix I Tables 8-11. A detailed analysis of the Reclamation Ditch flows using the most recent USGS data reveals that average flows are lower than indicated in Schaaf & Wheeler and the SEIR Appendix I. The following Table 3 below shows the average monthly flow according to USGS for the last 5 years, 10 years and 2013 as compared to the values in the SEIR Appendix I Tables 8 to 11.

Table 3: Reclamation Ditch Flows¹²

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Normal Years (Ac-ft)												
USGS 5 yr Avg minus Instream	>360	>360	>360	340	123	74	83	77	35	108	>360	>360
USGS 10 yr Avg minus Instream	>360	>360	>360	356	59	93	98	96	45	129	>360	>360
Table 8	70	66	70	106	79	99	113	109	72	65	89	76
Table 9	0	0	0	106	79	99	113	109	72	11	0	0
Table 10	0	0	0	106	79	99	113	109	72	0	0	0
Dry Years (Ac-ft)												
USGS 2013(Same Jan/Feb as Tbl11)	0	0	42	4	0	28	53	57	23	16	43	0
Table 11	0	0	70	106	79	99	113	109	72	65	89	0

Note: >360 is when diversion flows above 6 cubic feet per second (CFS) after subtraction of the instream of 2 CFS.

Table 3 shows that for the months of May through September there is a reduction of average flow per month of 16% between the Table 8, 9 and 10 compared to the USGS flows for a 10 year comparison. Table 3 also shows that for the months of June through September there is a reduction of average flow per month of 16% between the Table 8, 9 and 10 compared to the USGS flows for a 5 year comparison. In addition, using the USGS flows for 2013 with similar assumptions for December-February, there is a 67% reduction

in flow as compared to the predicted dry year in SEIR Table 11. As a result, the SEIR overstates the availability of Reclamation Ditch flow potentially available as source water for PWM Phase One and the PWM Expansion. Again, in this case the available flow to the PWM Phase One and the PWM Expansion should be reconsidered and revised accordingly.

The Schaaf & Wheeler report for the Reclamation Ditch indicates that agricultural flows are continuing to drop, and have dropped 1/3 in recent years. This would likely mean there are reductions in the monthly flows from Blanco Drain as well as the Agricultural Wash Water below what is projected in the SEIR. The flows for these two proposed sources were not updated beyond what was provided in the original Draft EIR for the PWM Phase One in 2016 in Appendix B – Source Water Assumptions Memorandum dated March 26, 2015. Both of those data sources in the SEIR Appendix I Tables 8 through 11 are based on similar dated information from 2014. If the flows from the Blanco Drain and Agricultural Wash Water are considered to have similar percentage reductions during the April to October period as Reclamation Ditch flows, then there are likely conditions where the actual flows available may not be able to supply the PWM Phase One let alone the PWM Expansion.

Supplies and Demands

The combined analysis of supplies and demand illustrated in Figure 4 below (Normal/ Wet Year Building ASR) and (Dry Year) are based on monthly supply and demand from SEIR Appendix I-Tables 9 and 11 with data updated as noted in Table 1 above. Figure 4 shows that when lower WWTP Flow from Figure 3 and lower Reclamation Ditch flows from Table 3 and all other available sources are accounted for, that demand for those specific source waters far exceeds available supplies in Normal/Wet Years and in Dry Years.

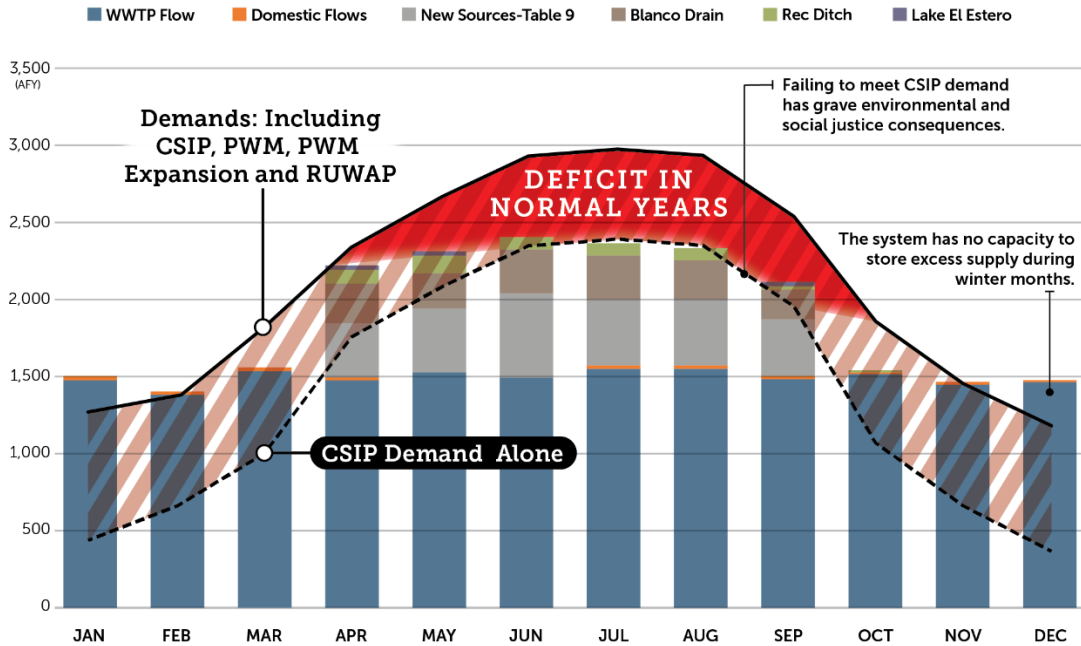
Table 2 above shows that in Normal Years Building a Reserve (Table 9 Updated Column), there is potentially only 84 AF available from all of the available supplies for the PWM Expansion. Then in Dry Years, Table 2 shows there is actually no flow available from all of the supplies for the PWM Phase One or the PWM Expansion assuming water is still supplied to the CSIP with some flow taken from CSIP as a water right (as described in the Final Supplemental EIR-3.3 Master Response #3: Comments on Water Supply and Source Water Availability) to serve the Regional Urban Water Augmentation Project (RUWAP). Based on this analysis, PWM Phase One and PWM Expansion would not be able to provide their promised product water to the Peninsula during dry years, which are 3,500 AFY and 2,250 AFY, respectively.

Figure 4: Impacts of Demands Exceeding Limited Supplies

Best Case Scenario based upon SEIR Appendix I-Table 9 with revised WWTP Flows (Updated Table 9) shows a supply deficit such that 84 Acre-Ft is available to PWM Expansion. The Worst Case Scenario based upon SEIR Appendix I – Table 11 Dry Year with revised WWTP Flows (Updated Table 11) shows a deficit with Zero flow available to PWM, PWM Expansion and reduced flow to CSIP.

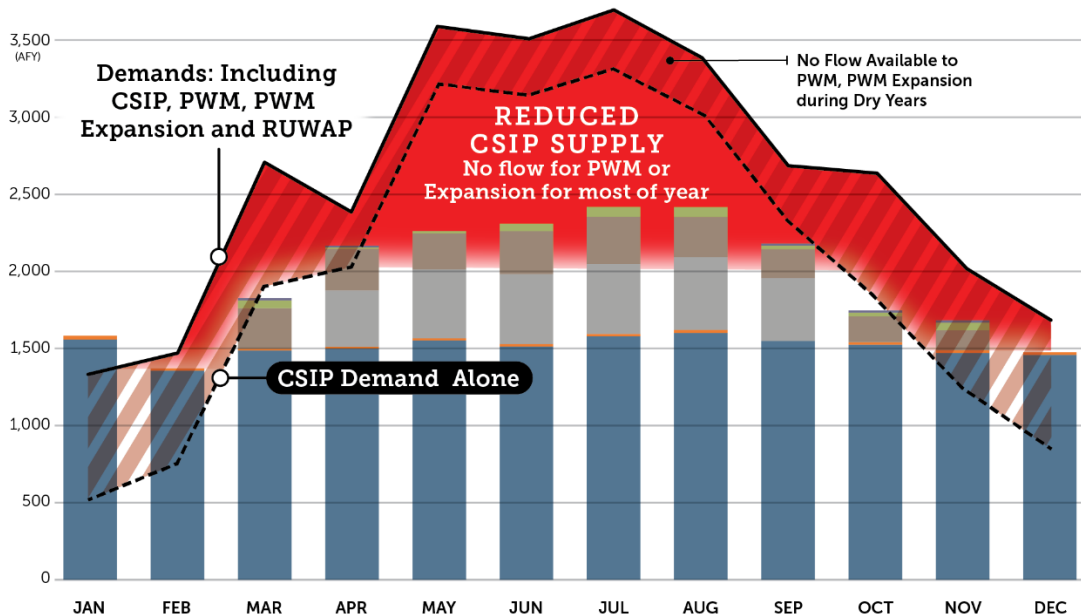
Best Case Scenario – Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario – Typical Dry Year

DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY



The demand assumptions in Figure 4 use the same values in SEIR Appendix I Tables 9 and 11 for CSIP, PWM Phase One, PWM Expansion and RUWAP which are the same values used in Table 1 above.

As shown in Figure 4 above there is a demonstrable water deficit. Monthly supply of water as compared to demand even when the additional proposed supplies of Agricultural Wash Water, Urban Runoff, Blanco Drain, and Reclamation Ditch are included does not satisfy the demand during a significant portion of the year – particularly during the summer months.

Water Supply Deficit for either PWM Expansion or CSIP

Without an adequate supply of source water, the Peninsula is placed in a difficult position of whether to supply water to the PWM Expansion or the CSIP system, which will impact the environment long term. Although there are water rights for the water that MWMWD proposes to use to supply the PWM Expansion, there are overstatements of the actual flows that need to be addressed. Protecting public health and the environment requires determining the true volumes available for the project and whether those flows can be counted on day in and day out for supply of water to the Peninsula.

Figure 5 closely correlates the cumulative water supplies to the respective cumulative demands. The water supplies are shown in the order of use with the PWM Phase One using Blanco Drain and Rec Ditch. Based on agreements, such as the Amended and Restated Water Recycling Agreement between the M1W and the Monterey County Water Resources Agency, those flows are unavailable to the PWM Expansion. Then New Sources are added to serve as the supplies for the PWM Expansion according to the priorities and water rights as defined in SEIR Appendix M. The supplies are cumulative by month. The graphs are based on SEIR Appendix I -Table 9 and 11 with the WWTP and Reclamation Ditch flows updated. These graphs include Lake El Estero and AWW, which are now not included in the water supply as noted in SEIR Appendix M as a best-case supply scenario (SEIR Appendix M-Page 5).

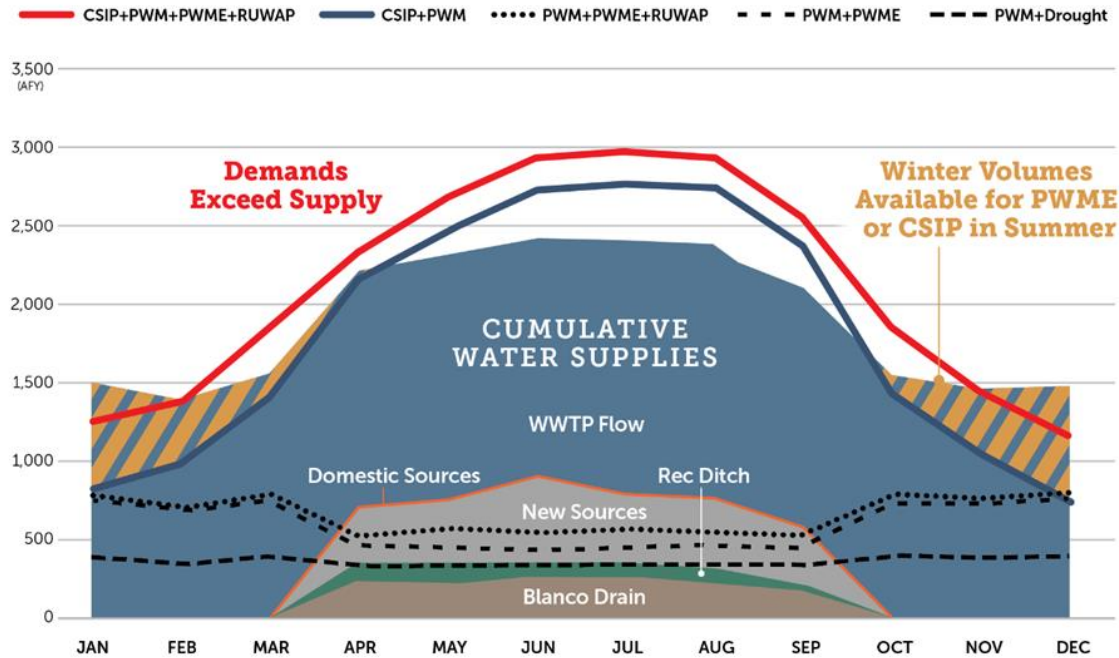
The demands in Figure 5 are each shown cumulatively for PWM, then PWM+PWME, then PWM+PWME+RUWAP, and ultimately PWM+PWM+RUWAP and CSIP. There is a separate blue line of PWM+CSIP to show a normal year today without the PWM Expansion. That line is necessary to determine available volume in the winter.

Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario based upon SEIR Appendix I-Table 9 with revised WWTP Flows (Updated Table 9) shows winter volume available for PWM Expansion or if injected could be used for CSIP in the summer. The Worst Case Scenario is based upon SEIR Appendix I – Table 11 Dry Year with revised WWTP Flows (Updated Table 11) shows there is near Zero flow available for the PWM Expansion in winter and significant reduced flow to CSIP.

Best Case Scenario – Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario – Typical Dry Year

DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY

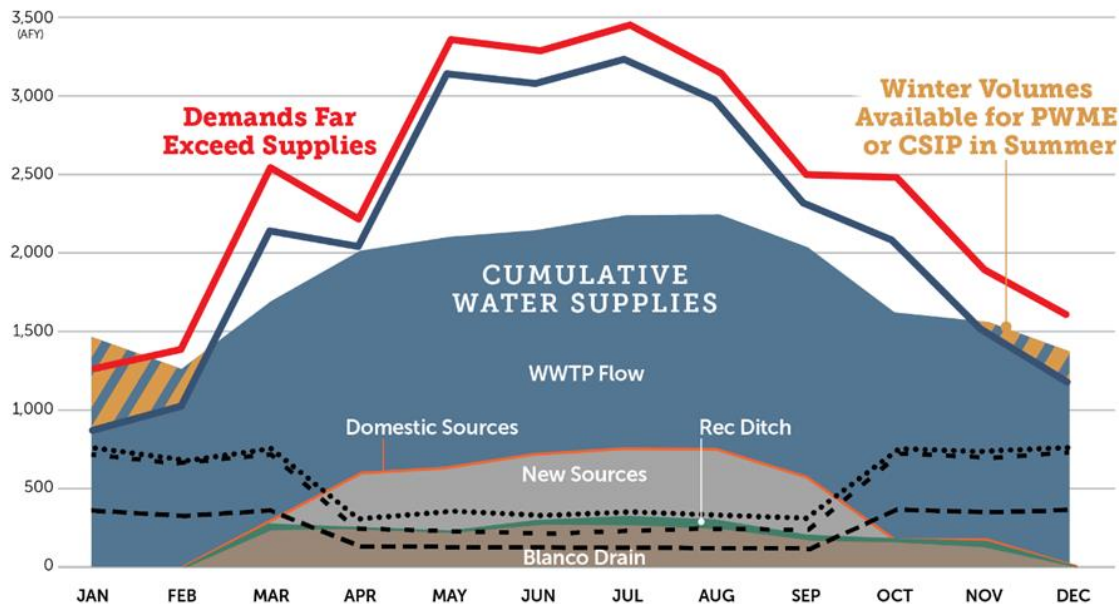


Figure 5 demonstrates that in normal years, excess winter effluent that would ultimately go to the Ocean can be used or it is otherwise wasted. However, with current CSIP demand the system will always be in a deficit. If CSIP could capture winter flow (such as the proposed but not implemented improvements to the Salinas Valley Reclamation Project (SVRP) (SEIR Master Response #3 p. 3-20, SEIR Appendix M- Page 5)) to run SVRP and CSIP at lower flows without using wells in conjunction with water storage or groundwater infiltration, then excess winter water could be available for use in the summer for CSIP. Implementing such a storage program would be a sizable new development project and would require a significant investment to secure and develop the necessary property where the storage program could be implemented (such as a reservoir). Further, for CSIP and CSIP well demands in SEIR Appendix I Tables 9-11 to be met, this would require all of the other New Water sources, Blanco Drain and Reclamation Ditch as well to meet the combined CSIP and CSIP well flows now and especially in dry years.

CSIP flows are shown in Figure 5 based on the SEIR Tables 8-11 including the CSIP well pumping. It should be noted that the improvements to SVRP have not been completed and therefore, the CSIP must rely on well pumping.

It should be highlighted that the flows shown in SEIR Appendix I for Tables 8-11 were not updated to match the assumptions in Final SEIR Appendix M. If the flows shown in Tables 8 to 11 were updated to account for the assumptions made in Final SEIR Appendix M, then the water supply deficit depicted in Figures 4 and 5 above would be even greater. For example, the Agricultural Wash Water and Lake El Estero were assumed to be unavailable in Final SEIR Appendix M. Moreover, Reclamation Ditch Flows were not reduced as noted in Table 3-B in the Final SEIR Master Response #3.

In addition, the SEIR Master Response #3 Table 3-A and SEIR Appendix M Table 2 both support the reduced flow of wastewater highlighted in Figure 3 above. One example is the use of 5,811 AFY as the Secondary Effluent available from the Outfall which is 3,000 AFY less than the estimated amount in Table 8, 9 and 10 of the SEIR Appendix I of 8,809 AFY. Assuming this is the updated Outfall flow, this would correlate to roughly 18,810 AFY of WWTP flow in 2018. Again, this was not highlighted in Source Water Availability, Use and Yield in SEIR Appendix I and as discussed earlier in this memorandum the regional wastewater flows have reduced since then. When these reductions are accounted for, the supply deficit will only increase. As a result, the technical analysis of the PWM Expansion has greatly overstated the reliability and availability of the source water. It is not feasible to achieve the PWM Expansion's projected water deliveries of 2,250 AFY based on the proposed water sources.

Responding to MPMWD and Water Demand Analysis

CalAm is responsible for assessing water demand on the Peninsula and continues to evaluate the impacts from climate change, regulatory drivers, growth in residential and commercial demands, impacts from water rates and restrictions imposed, and considers a future when the MPWSP is in place and how available water will shift demands. CalAm is contributing to conservation programs, participating in cutting edge research on leakage to apply the latest approaches to loss to their system.

All of this is done to ensure their customer demands are met, the environment is protected, and that water is not wasted. In performance of these duties, CalAm is continuing to assess the risks associated with meeting average demands, maximum day demand and peak hour demands. Hazen has participated in the studies with CalAm on system loss and is providing water resources planning services.

Hazen and Sawyer response to comments from MPMWD and WaterDM regarding prior memorandum:

Hazen and Sawyer is a national consulting engineering firm with a focus on all aspects of water supplies, planning, treatment and demands. We have local and national experts working on evaluation of water supplies and demands. It should be noted that WaterDM is a firm that collaborates with Hazen and Sawyer on large water supply projects and is currently a team partner for projects on the East Coast.

MPMWD and WaterDM reviewed Hazen’s prior memorandum dated January 2020 and point to many areas that they consider deficient, in error or misleading. Hazen disagrees with this claim. The Hazen memorandum as written highlights the substantial concern with assuming lower water demands on the Peninsula with no discussion of range of uncertainty. We feel the higher demands are warranted to provide a buffer for uncertainty. WaterDM and MPMWD have been unwilling to address the risk of the potential demand increases on supply. For supply to the PWM Expansion, these entities have avoided updating the flow data with transparent information on the proposed supplies.

WaterDM does not address variability or uncertainty of supplies in their report to a level to assess the risk of the supplies to meeting the lowest projected demands that they developed.

Hazen asserts that supply and demand planning in an area like the Monterey Peninsula that is dependent on new sources of water must look at the risk and must apply an appropriate level of reliability and resiliency as good engineering principles. MPMWD has not addressed the current supply as required by the California CWC Section 10635 for normal, dry and multiple dry years to prove the resilience of that supply. Our analysis highlights the need for more analysis with recent data including consideration of historical impacts to supply. This also gets to the heart of our prior memorandum.

Current codes and regulations as well as their interpretation are important to establishing a reliable and resilient water supply across a range of likely supply and demand conditions. MPMWD focused on the interpretation of Maximum Day Demand and Peak Day Demand versus annual demand which is well understood, but avoided the topic of assessing the long-term historical data in determining future demands and not just picking data to fit a narrative.

In addition, interpreting the latest revisions to American Waterworks Association (AWWA) M50 Manual to say that MPWMD can use 3 or 5 years of data when there is over 20 years of data available is not in line with the intent and spirit of the latest version of that document which Hazen participated in developing.

Hazen and Sawyer had the MPMWD Supply and Demand Report reviewed independently by Hazen’s nationally recognized demand expert, Dr. Jack Kiefer. He noted: *“There is not a standard or minimum amount of empirical rigor formally promulgated, which leads many to focus on simple averaging and story-telling instead of modeling cause and effect and then using official economic forecasts for evaluating and predicting growth. In addition, it is seldom when you see uncertainty explicitly accounted for or at least addressed which detracts from a higher-level objective of identifying, reducing and mitigating risks.”*

Hazen’s intentions with our comments on MPWMD’s analysis are consistent with that objective – a desire to see the Water Supply Solutions for the Monterey Peninsula truly evaluated and the risks of the water supply mitigated.

(Continued next page)

The demand analysis

performed by WaterDM assumes that existing water conservation measures will result in increased conservation without implementing more stringent measures, such as use moratoriums and water rationing. CalAm has invested heavily in Conservation Programs as well as paying for research into water loss and loss detection and mitigation strategies in an assertive effort to minimize the impact to the area in the absence of a water supply solution meeting the basic requirements noted herein. WaterDM and MPMWD do not acknowledge that the MPWSP was designed to avoid the need for further implementation of stringent measures, like moratoriums and water rationing. Those types of measures may be necessary to achieve the demands that WaterDM and MPWMD are projecting.

MPMWD's response to the Hazen memorandum regarding ASR, states that there is "no immediate present-day demands" for the PWM Expansion flow. If the PWM Expansion is the backup project to satisfy the CDO, as noted in the SEIR (Final SEIR Page 1-1), to supply water if MPWSP is not available then the water demand today would require all of that flow and flow from ASR that is not available.

MPMWD references multiple times the SEIR Appendix I-Tables 9 through 11 and states "the annual use of the new sources exceeds the annual AWPf demands." The SEIR documents however do not provide recent flow data as a basis for the claim that the multiple sources of water in the Appendix M of the SEIR actually available to the PWM Expansion. It highlights those flows are from assumptions and flow balance calculations. As noted herein, there is a need to assess the current water supplies with recent data from the water sources to fully validate that statement.

To assume that paper water is presently available without evaluating actual flow data is a significant error.

The WaterDM Supplemental Study maintains the same errors at the first WaterDM Study.

The water projections in the WaterDM Supplemental Study remain unreasonable, including an over estimation of the availability of ASR and PWM Phase One. Likewise, the WaterDM Supplemental Study understates demand on the Peninsula and overlooks M1W's July 20, 2020 report that indicates since the beginning of 2020 WWTP flows were reduced to 17,980 AF or 16.05 mgd. Nonetheless, meeting even the lowest demand projection in the Supplemental Study is unrealistic without the MPWSP and would require full capacity operation of the PWM Phase One and the PWM Expansion, supplies that have yet to prove reliable and are vulnerable to high-probability risks.

Recommendations and Conclusions

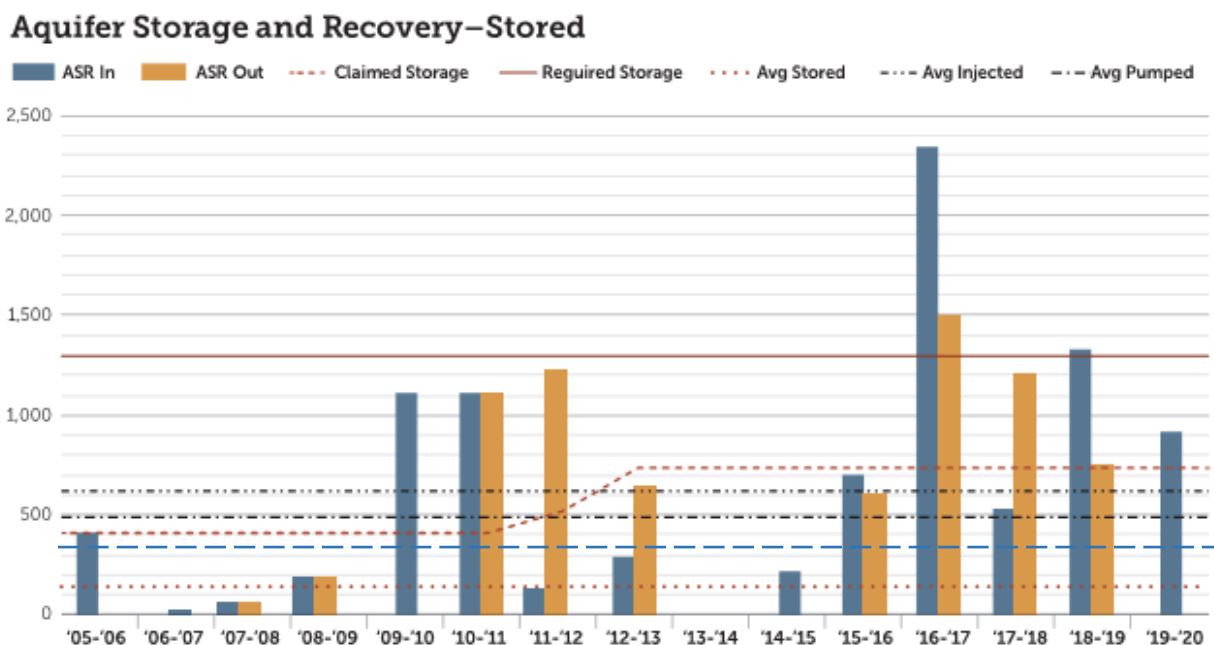
This memorandum is based on extensive analysis and a thorough review of the MPWMD Supply and Demand Report, the WaterDM Study, the Supplemental EIR for the PWM Expansion as well as other supporting documents. The following recommendations and conclusions are offered to the California Coastal Commission to consider as it evaluates the MPWSP and considers the feasibility of the PWM Expansion:

- 1** MPWMD Supply and Demand Report and SEIR for the PWM Expansion put the Peninsula in jeopardy of not having water available for meeting current demands with no recognition and accommodation for future uncertainty within the supplies proposed. (Refer to Figure 2).
- 2** MPWSP is the only currently proposed and feasible solution that provides safe secure reliable and resilient supply for a diversified portfolio for the Peninsula. (Refer to Figure 2).
- 3** The water supplies proposed for the PWM Expansion need further analysis with recent flow data to assess that water is actually available. Even if it is assumed that MPWMD has sufficient water rights to the source water for the PWM Expansion, which we understand it does not, holding adequate water rights will not actually secure water for the PWM Expansion if there is not actual water available to treat. (Refer to Figure 3).
- 4** The complex water supply management strategy to prioritize water supplies with limited historical flow information is a risk that must be considered in evaluating flows used for ensuring potable water supplies.
- 5** There is a deficit in water that will be available to the PWM Expansion when considering today's wastewater flows and Reclamation Ditch flows based on the most recent available data. Figure 4 highlights the deficit in supplies available to meet demands of PWM Phase One, CSIP, RUWAP and PWM Expansion.
- 6** Assuming that there are adequate water rights for the water supplies that MPWMD proposes to supply the PWM Expansion, the SEIR and supporting studies overstate the actual flows available for the PWM Expansion. The true flow available to the PWM Expansion needs to be addressed to determine the true volumes available and to determine if those flows can be counted on day in and day out to supply the Peninsula. Based on the proposed supplies as studied to date, PWM Expansion appears infeasible.
- 7** The PWM Expansion should be reevaluated based on updated and accurate flow data and demands such as CSIP and PWM. Current flows even in best of water supply cases shows that CSIP will always be in a deficit. The impact of the CSIP deficit should be evaluated to avoid unintended environmental impacts if seawater intrusion is not mitigated by CSIP flows.

Appendix

Figure 6 represents the current Aquifer Storage and Recovery program over the past 15 years in operation. Figure 4 shows the average annual injected and annual average pumped volume. The average stored volume annually over 15 years is 138 acre-ft. Over 15 years there is only 700 acre-ft claimed as storage yet the MPMWD Supply and Demand Report indicates they can store 1,300 acre-ft per year. There are only two years the system has achieved more than 1,300 acre-ft into the aquifer. The limited average storage coupled with the injection limitations being experienced at PWM Phase One means these supplies are not yet reliable to be considered as a source that CalAm or any other public agency.

Figure 6: Aquifer Storage and Recovery



Figures 7 and 8 are provided as further information for Updated Tables 8 and 10 to highlight that in all conditions, there is a flow deficit with updated WWTP and Reclamation Ditch Flows. In the above document, Best Case and Worst Case were used to keep the discussion simple and direct. There is a flow deficit in all conditions and there is a need to update the relevant calculations with recent flow data to give an accurate assessment of supply and demand in a clear and transparent way.

Figure 7: Supply Deficit – SEIR Appendix I - Updated Table 8

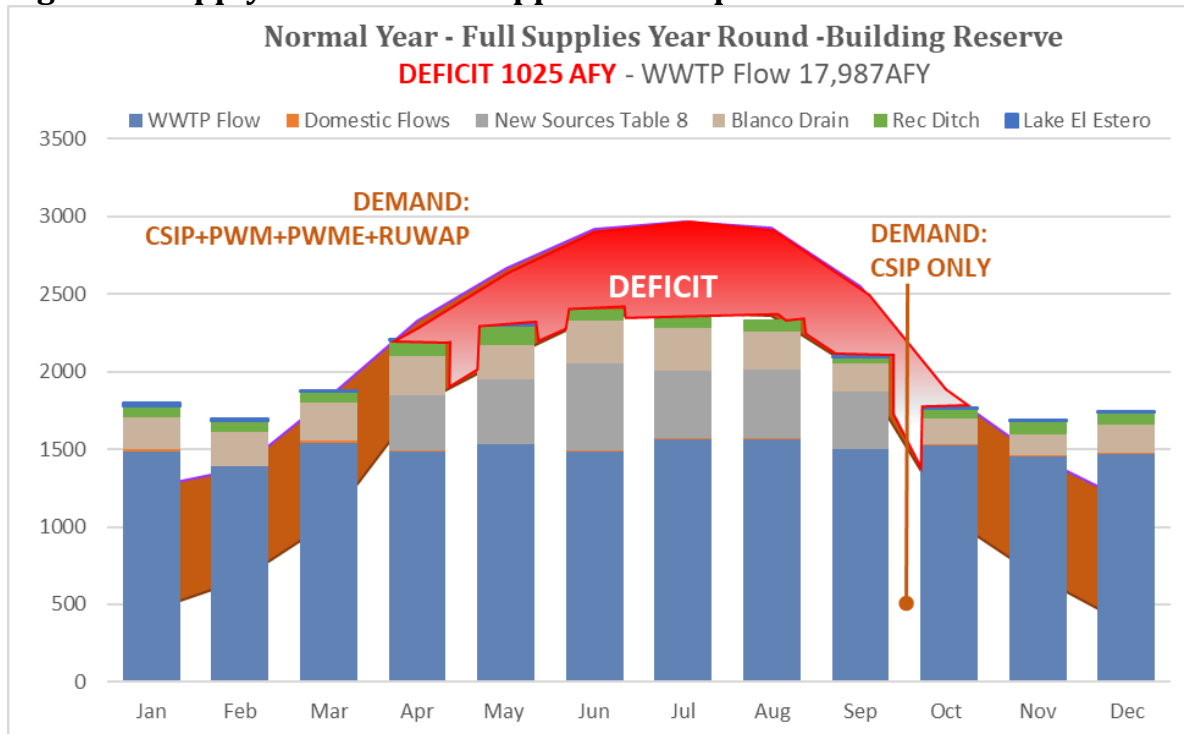
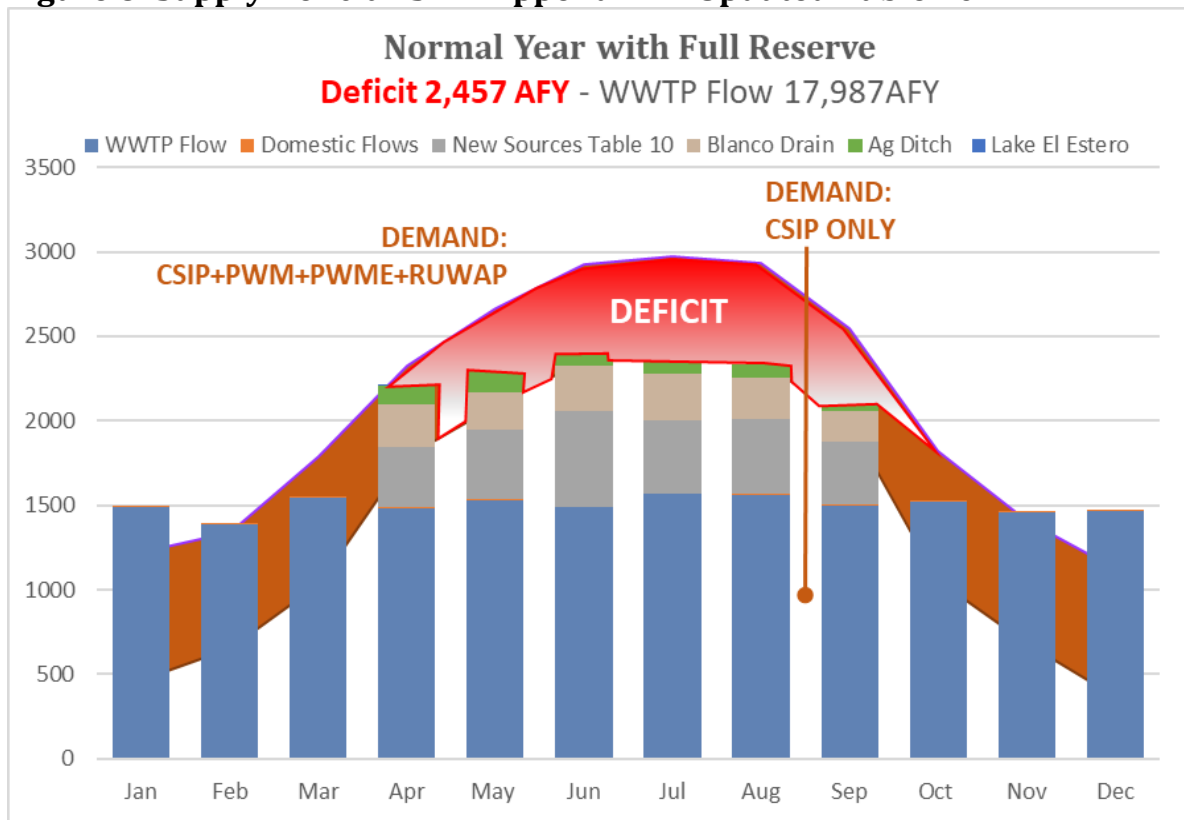


Figure 8: Supply Deficit – SEIR Appendix I - Updated Table 10



References

- ¹ Governor Gavin Newsome's [2020 Water Supply Portfolio](#) – Executive Summary-Page 1
- ² PWM Phase One 2016 Draft EIR Appendix P-Reclamation Ditch Yield Study - Page 12
- ³ PWM Expansion Supplemental EIR, April 2020 – Main Body, Page 3-1
- ⁴ PWM Expansion Final Supplemental EIR, Appendix O, Supply and Demand for Water on the Monterey Peninsula, March 13, 2020. Page 20
- ⁵ PWM Expansion Supplemental EIR, April 2020 – Main Body, Page S-1
- ⁶ Exhibit 4-B Expert Report and Recommendations of Peter Mayer, P.E. Regarding Water Supply and Demand in the California American Water Company's Monterey Main System, prepared for The Marina Coast Water District, April 21, 2020 page 26
- ⁷ PWM Expansion Supplemental EIR, April 2020, Appendix I – Source Water Availability, Yield, and Use Technical Memorandum, Tables 8-11.
- ⁸ Final PWM Phase One 2016 EIR Consolidated – Jan 2016 - Volume I - Figure 2-9 Historic Regional Treatment Plant Flows
- ⁹ Supplemental EIR, April 2020, Appendices to the M1W Draft Supplemental EIR 11-7-2019 -Appendix E - Water Quality and Statutory Compliance Report-Appendix C – Projected Monthly Flows of Source Waters to the Regional Treatment Plant Influent
- ¹⁰ M1W Adhoc Committee Meeting, July 20, 2020 supporting documents.
- ¹¹ PWM Expansion Final Supplemental EIR, Appendix O, Supply and Demand for Water on the Monterey Peninsula, March 13, 2020, Page 7 [Figure 1 – Annual Water Production for Customer Service (Demand) Last 21 Years]
- ¹² USGS Website - https://waterdata.usgs.gov/nwis/uv?site_no=11152650

EXHIBIT 1

Jack Kiefer, PhD Resume

Hazen and Sawyer

Water Resources Expert



Jack C. Kiefer, PhD

Senior Associate

Dr. Kiefer is an economist and geographer specializing in multiple consulting areas of water resource economics and planning, econometrics, and integrated water demand and supply planning and management.

Education

PhD, Geography, Southern Illinois University

MA, Monetary and Development Economics, Southern Illinois University

BA, Economics, Southern Illinois University

Areas of Expertise

- Water Resources Planning
- Economic Analysis
- Econometrics
- Water Demand Forecasting
- Impact and Process Evaluation
- Risk and Uncertainty Analysis
- Water Supply Reliability Planning

Experience

- 30 total years
- 13 years with Hazen

Professional Activities

American Water Works Association

American Water Resources Association

Prior to joining Hazen and Sawyer, Dr. Kiefer led CDM's Water Economics group and was a Lead Practitioner in the area of Water Resources. Before joining CDM, Dr. Kiefer directed Planning and Management Consultants, Ltd.'s Water Resources Research program and its five business service lines of Integrated Water Demand and Supply Planning, Resource Economics and Quantitative Analysis, Navigation Analysis, Military Resources Planning and Environmental Planning.

Dr. Kiefer is an expert in forecasting the demand for potable water. He has performed numerous analyses of water demand, including the development of long term water demand forecasts for some of the largest water utilities in the United States, including the Metropolitan Water District of Southern California, Tampa Bay Water, and San Diego County Water Authority. Dr. Kiefer is also an expert in conducting empirical evaluations of demand management programs. He has led water conservation studies for large utilities in the Southwest and demand management plans for Tampa Bay Water, the City of Phoenix, and New York City. He has also served as principal investigator on several Water Research Foundation (WaterRF), projects where he has led evaluations of urban water demands as part of WaterRF's Strategic Climate Change initiative and Water Demand Forecasting focus area.

Dr. Kiefer has more than 15 years of consulting experience with the U.S. Army Corps of Engineers (Corps) for whom he directed economic and water resources planning studies. He has addressed the Corps' major Civil Works program functions, including Water Supply, Hydropower, Navigation, Recreation, Ecosystem Restoration, and Flood Damage Reduction. Dr. Kiefer has considerable expertise in the areas of risk analysis, multipurpose planning, and multi-criteria decision support techniques.

In 1997, he received the Commander's Award for Public Service from the Department of the Army for outstanding performance in support of the U.S. Army Corps of Engineers Cost Savings Task Force, which helped to identify and automate cost savings measures and to facilitate the analysis of those same measures nationwide.

Technical Publications

Evaluation of Customer Information and Data Processing Needs for Water Demand Planning and Management. Kiefer, J. and L. Krentz. 2016. Denver, Colo.: Water Research Foundation.

"Differentiating the Impacts of the Economy, Efficiency, and Conservation on Water Demands." J. Kiefer. 2016. The Georgia Operator, Volume 53, No.3, Summer 2016.

Water Demand Forecasting in Uncertain Times: Isolating the Effects of the Great Recession. Kiefer, J., Johns, G., Snaith, S., and B. Dziegielewski. 2016. Denver, Colo.: Water Research Foundation.

Methodology for Evaluation Water Use in Commercial, Industrial, and Institutional Sectors. 2015. J. Kiefer, L. Krentz, and B. Dziegielewski. Water Research Foundation, Denver.

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U.S. Water Demand, Supply and Allocation: Trends and Outlook. 2007. B. Dziegielewski and J. Kiefer. IWR Report 2007-R-03, Institute for Water Resources, Alexandria, Virginia.

Literature Review of Computer-Aided Collaborative Decision Making. 2007. A. Imwiko and J. Kiefer. U.S. Army Corps of Engineers, Institute for Water Resources. Alexandria, Virginia.

"Prevailing Water Demand Forecasting Practices and Implications for Evaluating the Effects of Climate Change." 2006. J. Kiefer. Proceedings of American Water Works Association 2006 Water Sources Conference, Albuquerque, New Mexico.

Evaluation of Water Ratemaking Practices and Rate Structure Complexity in Illinois Water Systems. 2004. J. Kiefer. Doctoral dissertation. Copyright © 2004, Jack C. Kiefer.

"Water Supply Planning and Risk Management: Coping with the Costs of Uncertainty." 2004. J. Kiefer. Proceedings of North

Water Demand Planning and Management

Principal Investigator, Portfolio of Applied Research for the Water Research Foundation

- Uncertainty in Long Term Water Demand Forecasting (Project 4558)
- Water Use in the Multifamily Sector (Project 4554)
- Water Demand Forecasting in Uncertain Times: Isolating the Effects of the Great Recession (Project 4458)
- Methodology for Evaluating Water Use in Commercial, Institutional and Industrial Sectors (Project 4375) –
- Analysis of Changes in Water Use under Regional Climate Change Scenarios (Project 4263)
- Evaluation of Customer Information and Data Processing Needs for Water Demand Planning and Management (Project 4527)
- Principal Investigator, Water Research Foundation Project 4735, Methodology for Determining Baseline Commercial, Institutional and Industrial End Uses of Water

Long-Term Demand Forecasting System (LTDFS) Update, Tampa Bay Water, Tampa Bay, FL

Technical Director leading a team to redevelop all elements of LTDFS, including estimation of econometric and end use water efficiency models, focusing on exploratory data analysis of an expanded time-series and cross-sectional database of water demands in the Tampa Bay region.

Long-term Water Demand Forecasts, San Diego County Water Authority, San Diego, CA

Project Manager of development of five consecutive water demand forecasts and forecast updates for the San Diego County Water Authority, in support of the Agency's periodic development of its Urban Water Management Plan. Original efforts involved the development of econometric models of M&I water demands, which were followed by development of predictive models for agricultural demands. More recent support to the Authority has included the analysis of climate change impacts on water demand and the development and application of risk-based simulation procedures to support long-term supply reliability and capital improvement planning.

Modeler/Analyst, Water Research Foundation Project 4309, Residential End Uses of Water Update

Dr. Kiefer was responsible for developing models of key indoor and outdoor residential end uses of water, using end use logging data for a large sample of households across the US and Canada, relating end use water consumption to household demographic and economic characteristics, as well as the price for water and sewer services.

Carolina American Water Works Association/Water Environment Association 84th Annual Conference, November 14-17, 2004, Charlotte, NC.

"Development of Probabilistic Water Demand Forecast for the Tampa Bay Region: A Review of Methodological Features." 2003. J. Kiefer. Proceedings of American Water Works Association 2003 Annual Conference and Exposition, Anaheim, CA.

"Relating Demand and Supply Uncertainty to the Incremental Cost of Water Supply Reliability." 2003. J. Kiefer, D. Anderson, and A. Adams. Proceedings of Florida Section of American Water Works Association 2003 Annual Conference and Exposition.

"Risk-Based Water Demand Forecasting: Balancing Uncertainty and Sustainability in Water Supply Planning." 2003. J. Kiefer. Proceedings of American Institute of Hydrology 2003 Annual Conference, Atlanta, Georgia.

"Water Demand Forecasting in a Regulatory Environment." 2002. J. Kiefer and B. Dzigielewski. Proceedings of American Water Works Association 2002 Water Sources Conference. Denver, Colorado.

Commercial and Institutional End Uses of Water. 2000. B. Dzigielewski, J. Kiefer, E. M. Opitz, G. A. Porter, G. Lantz, P. Mayer, W. DeOreo and J. Nelson. American Water Works Association Research Foundation. Denver, Colorado.

Residential End Uses of Water. 1999. P. Mayer, W. DeOreo, E. M. Opitz, B. Dzigielewski, J. Kiefer, W. Y. Davis and J. Nelson. American Water Works Association Research Foundation. Denver, Colorado.

"The Search for Acceptable Water Rates: Research Needs and Possibilities." 1999, J. Kiefer. Journal of Contemporary Water Research and Education (formerly Water Resources Update), Vol. 114.

"Demand Uncertainty: Portraying and Quantifying the Risks for Planning." 1998. J. Kiefer. Proceedings of the American Water Works Association (AWWA) 1998 Annual Conference. AWWA. Denver, Colorado.

Technical Director, Water Conservation Planning Support, NYC-DEP, NY

Technical Director, of the development of NYC DEP's Water Demand Management Plan (WDMP) through a series of investigations involving pilot efficiency projects, water reuse at specific facilities, spatial demand profiling, and assessment of large users, drought management, and water pricing strategies. The objective of this project was to assist NYC DEP in the development of its WDMP through a series of investigations involving pilot efficiency projects, water reuse at specific facilities, spatial demand profiling, assessment of large users, drought management, and water pricing strategies.

Enhancements to New York City's Long-Term Water Demand Forecasting Model, NYCDEP, NY

Technical Director for this project. The objective was to make incremental improvements to NYCDEP's long-term water demand forecasting model to incorporate key future trends and uncertainties related to water efficiency and climate. The updated model included a water efficiency index, climatic variables, and residual variance factors at both annual and monthly time steps, which supports development of multiple forecast scenarios.

Other Relevant Experience

- Co-Principal Investigator, Water Reuse Research Foundation Project 09-04, The Value of Water Supply in the Commercial, Industrial, and Institutional (CII) Sector
- Principal Investigator, Water Conservation Metrics Study
- Water Demand Management Plan, Tampa Bay Water, FL
- Project Manager, Phoenix Water Demand Management Plan Support, AZ
- Technical Director, Long-Term Forecast Performance Monitoring, Tampa Bay Water, FL
- Principal Investigator, Long-Term Probabilistic Water Demand and Supply Reliability Forecast for Tampa Bay Water, FL
- Project Manager, Future Needs Analysis, Tampa Bay Water, FL
- Project Director, Development of Water Demand Forecasting Methodologies for the Delaware River Basin Commission, FL
- Principal Investigator, Phoenix Meter Accuracy Study, AZ
- Project Manager, Study of Institutional and Legal Environment of Texas Water Supply Allocation, TX
- Project Manager, Model Development and Long-Term Water Demand Forecasts for Metropolitan Water District of Southern California, CA

"Anticipating Nonresidential Flood Damages: A Report of Findings of a Survey of Businesses in the Wyoming Valley of Pennsylvania." 1998. J. Kiefer and S. Davis. Proceedings of the 22nd Annual Conference of the Association of State Floodplain Managers (ASFPM).

Incorporating Risk and Uncertainty into Forecasts of Waterborne Traffic Flows: A Reference Manual of Methodologies and Hypothetical Examples. 1997. J. Kiefer. U.S. Army Corps of Engineers, Institute for Water Resources. Alexandria, Virginia.

Analysis of Non-residential Content Value and Depth-Damage Data for Flood Damage Reduction Studies. 1996. J. Kiefer and S. Willett. U.S. Army Corps of Engineers, Institute for Water Resources. Alexandria, Virginia.

"Statistical Analyses of Water Conservation Issues: The Case of Phoenix, Arizona." 1996. J. Kiefer and J. DeWitt. Proceedings of CONSERV96. Conference hosted by the American Water Works Association in Orlando, Florida.

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Urban Water Conservation Programs Volume I: Annotated Bibliography. 1994. Opitz, E.M., B. Dziegielewski, N.A. Hanna-Somers, J. Kocik, J.R.M. Steinbeck, H.P. Garbharran, J.C. Kiefer and K.L. O'Grady. U.S. Army Corps of Engineers, Institute for Water Resources; U.S. Geological Survey; Metropolitan Water District of Southern California; Southern Nevada Water Authority; California Urban Water Agencies; Phoenix Water Services Department and American Water Works Association.

- Project Manager, IWR-MAIN Water Demand Management Suite
- Project Manager/Principal Investigator, City of Albuquerque Water Conservation Program, NM
- Coauthor and Principal Modeler, AWWARF Residential End Uses of Water and Commercial & Institutional Uses of Water Studies
- Project Manager/Principal Investigator, Cost-Effectiveness Evaluations of Pilot Water Conservation Projects for the Cities of Lacey, Olympia and Tumwater (LOTT Wastewater Partnership)

Water Resources Planning and Economics

- Principal Investigator, Civil Works Program Strategy Papers. USACE Institute for Water Resources
- Principal Investigator, Review of Computer-Aided Decision-Making in Water Resources Planning and Management. USACE Institute for Water Resources
- Project Manager, Expert Independent Reviews of Corps of Engineers Economics and Planning Studies, USACE Institute for Water Resources
- Economics Team Leader, National Economic Analysis of Water Use for the Republic of Ireland
- Principal Investigator, USACE New Orleans District, Economic Impact Analysis of Louisiana Coastal 2050 Restoration Initiative, LA
- Project Manager/Principal Investigator, Evaluation of National U.S. Army Corps Capital Stock Investments and Programmatic Benefits
- Project Manager, National Dredging Needs Study of U.S. Ports and Harbors
- Principal Investigator, Plan Formulation Training Course for the Corps of Engineers
- Project Manager, America's Water Resources Challenges for the 21st Century
- Project Manager, USACE/BPA Hydroelectric Investment Guide
- Project Manager/Principal Investigator, USACE Flood Damage Reduction Studies

EXHIBIT 2

SEIR Appendix I – Source Water Availability, Yield and Use
Technical Memorandum-

Tables 8, 9, 10 and 11

Table 8: Source Water Analysis for the Pure Water Monterey Groundwater Replenishment Project

Full Surface Water Yields, Normal Water Year, Building a Drought Reserve

All facilities built ¹ - average water year conditions - all flows in acre-feet													10/14/2019
<u>SOURCES</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
Existing RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,764
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	82

New Source Water

City of Salinas													
1 Salinas Agricultural Wash Water ²	156	158	201	307	311	391	435	444	367	410	329	223	3,732
Agricultural Wash Water (AWW) to Ponds ³	156	158	201	0	0	0	0	0	0	410	329	223	1,477
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,255
2 Salinas Urban Storm Water Runoff ⁴	52	41	34	16	2	0	0	0	2	8	23	47	225
Urban runoff to ponds	52	41	34	0	0	0	0	0	0	8	23	47	205
Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	20
3 Rainfall (on SIWTF, 121 acre pond area) ⁵	26	24	21	11	3	1	0	0	2	6	14	24	132
4 Evaporation (from SIWTF, 121 acre pond area) ⁶	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251)
5 Percolation ⁷	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257)
6 SIWTF pond storage balance ⁸	684	763	847	647	362	0	0	0	0	253	466	605	
7 Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	172	0	0	0	0	0	0	304
8 AWW and Salinas Runoff to RTP	0	0	0	355	413	563	435	444	369	0	0	0	2,579
Water Rights Applications to SWRCB													
9 Blanco Drain ⁹	209	223	246	252	225	274	277	244	184	168	133	185	2,620
10 Reclamation Ditch at Davis Road ¹⁰	70	66	70	106	79	99	113	109	72	65	89	76	1,014
11 Tembladero Slough at Castroville ¹¹	0	0	0	0	0	0	0	0	0	0	0	0	0
12 City of Monterey - Diversion at Lake El Estero	24	15	14	5	1	0	0	0	1	4	10	13	87
13 Subtotal New Waters Available	303	304	330	718	718	936	825	797	626	237	232	274	6,299
Total Projected Water Supply	2,115	1,987	2,207	2,523	2,574	2,739	2,723	2,692	2,443	2,085	1,999	2,057	28,145

DEMANDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Average SVRP deliveries to CSIP (2009-2013)	13	459	726	1,376	1,763	1,750	1,866	1,854	1,698	984	448	18	12,955
14 FIVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4,272
TOTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,227

15 FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPf	367	331	367	355	367	355	367	367	355	367	355	367	4,320
16 FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE													
(200 AFY AWTf PRODUCT WATER) ¹⁴	42	38	42							42	41	42	248
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
17 FEEDWATER TO AWPf FOR MCWD RUWAP ¹⁸	28	19	33	70	108	110	113	94	85	51	21	9	741
18 TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	799	721	800	539	581	566	585	572	549	800	773	800	8,087

Total Projected Water Demand	1,260	1,376	1,829	2,328	2,668	2,922	2,971	2,929	2,547	1,860	1,455	1,169	25,314
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Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
19 Secondary effluent to SVRP for CSIP ¹²	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,750
20 New sources available to CSIP ¹³	0	0	0	249	245	480	353	319	162	0	0	0	1,808
21 Total Supply to CSIP	461	654	1,030	1,984	1,993	2,173	2,138	2,121	1,894	1,059	681	370	16,558
Net CSIP Increase													3,603
22 Surface waters at RTP to AWPf	303	304	330	114	106	101	105	111	109	237	232	274	2,325
23 Secondary effluent to AWPf	468	398	437	0	0	0	0	0	0	513	520	517	2,854
24 AWW and Salinas urban runoff to AWPf	0	0	0	355	367	355	367	367	355	0	0	0	2,166
25 Secondary effluent to AWPf for MCWD RUWAP	28	19	33	70	108	110	113	94	85	51	21	9	741
26 Feedwater to AWPf	799	721	800	539	581	566	585	572	549	800	773	800	8,086
Subtotal- all waters (including secondary effluent)	1,260	1,376	1,829	2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,455	1,169	24,644

27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL (2009-2013) ¹⁵	1,785	1,219	1,141	420	88	49	27	34	114	859	1,314	1,759	8,809
28 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED DIVERSIONS TO CSIP/AWT/RUWAP ¹⁶	854	611	377	0	0	0	0	0	0	226	545	887	3,501
29 NEW SUPPLIES IN EXCESS OF AWT DEMANDS FOR GWR ¹⁷	(468)	(398)	(437)	249	245	480	353	319	162	(513)	(520)	(517)	(1,046)
30 AWT BRINE TO OCEAN OUTFALL	152	137	152	102	110	108	111	109	104	152	147	152	1,536

Notes

- 1 Presumes all facilities associated with diversions are completed, including SVRP modifications.
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
- 4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.
- 5 Rainfall from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015. Pond area presumed to be Ponds 1,2, 3 + Aeration lagoon. No rainfall/evaporation or storage assigned to drying beds.
- 6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 2015.
- 7 Table 4, Ibid.
- 8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RIBs or drying beds or flow can be diverted to the RTP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).
- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right applciation 32263B. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
- 11 Water right application 32263C. Max. diversion = 3 cfs. Removed from project portfolio during water rights process. See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.
- 12 Includes secondary effluent wastewater currently used to produce recycled water at the Salinas Valley Reclamation Project (SVRP), and additional amounts which may be used during periods of low demand (<5 mgd) with the proposed improvements to the SVRP.
- 13 New source waters not used by AWPf will be available to SVRP for CSIP.
- 14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFY additional product water from the GWR Project AWTf during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.
- 15 Average monthly RTP discharge, 2009-2013 (reported by M1W).
- 16 Secondary treated municipal effluent not used for SVRP or the AWPf.
- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

Table 9: Source Water Analysis for the Pure Water Monterey Groundwater Replenishment Project

Diversion Pattern for a Normal Water Year, Building a Drought Reserve

All facilities built ¹ - average water year conditions - all flows in acre-feet													10/14/2019
<u>SOURCES</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
Existing RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,764
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	82

New Source Water

City of Salinas													
1 Salinas Agricultural Wash Water ²	156	158	201	307	311	391	435	444	367	410	329	223	3,732
Agricultural Wash Water (AWW) to Ponds ³	156	158	201	0	0	0	0	0	0	410	329	223	1,477
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,255
2 Salinas Urban Storm Water Runoff ⁴	52	41	34	16	2	0	0	0	2	8	23	47	225
Urban runoff to ponds	52	41	34	0	0	0	0	0	0	8	23	47	205
Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	20
3 Rainfall (on SIWTF, 121 acre pond area) ⁵	26	24	21	11	3	1	0	0	2	6	14	24	132
4 Evaporation (from SIWTF, 121 acre pond area) ⁶	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251)
5 Percolation ⁷	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257)
6 SIWTF pond storage balance ⁸	684	763	847	647	362	0	0	0	0	253	466	605	
7 Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	172	0	0	0	0	0	0	304
8 AWW and Salinas Runoff to RTP	0	0	0	355	413	563	435	444	369	0	0	0	2,579
Water Rights Applications to SWRCB													
9 Blanco Drain ⁹	0	0	0	252	225	274	277	244	184	0	0	0	1,456
10 Reclamation Ditch at Davis Road ¹⁰	0	0	0	106	79	99	113	109	72	11	0	0	589
11 Tembladero Slough at Castroville ¹¹	0	0	0	0	0	0	0	0	0	0	0	0	0
12 City of Monterey - Diversion at Lake El Estero	0	0	0	5	1	0	0	0	1	0	0	0	7
13 Subtotal New Waters Available	0	0	0	718	718	936	825	797	626	11	0	0	4,631
Total Projected Water Supply	1,812	1,683	1,877	2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,767	1,783	26,477

DEMANDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Average SVRP deliveries to CSIP (2009-2013)	13	459	726	1,376	1,763	1,750	1,866	1,854	1,698	984	448	18	12,955
14 FIVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4,272
TOTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,227

15 FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPf	367	331	367	355	367	355	367	367	355	367	355	367	4,320
16 FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE (200 AFY AWTf PRODUCT WATER) ¹⁴	42	38	42							42	41	42	248
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
17 FEEDWATER TO AWPf FOR MCWD RUWAP ¹⁸	28	19	33	70	108	110	113	94	85	51	21	9	741
18 TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	799	721	800	539	581	566	585	572	549	800	773	800	8,087

Total Projected Water Demand	1,260	1,376	1,829	2,328	2,668	2,922	2,971	2,929	2,547	1,860	1,455	1,169	25,314
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Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
19 Secondary effluent to SVRP for CSIP ¹²	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,750
20 New sources available to CSIP ¹³	0	0	0	249	245	480	353	319	162	0	0	0	1,808
21 Total Supply to CSIP	461	654	1,030	1,984	1,993	2,173	2,138	2,121	1,894	1,059	681	370	16,558
Net CSIP Increase													3,603
22 Surface waters at RTP to AWPf	0	0	0	114	106	101	105	111	109	11	0	0	657
23 Secondary effluent to AWPf	771	702	767	0	0	0	0	0	0	738	752	791	4,522
24 AWW and Salinas urban runoff to AWPf	0	0	0	355	367	355	367	367	355	0	0	0	2,166
25 Secondary effluent to AWPf for MCWD RUWAP	28	19	33	70	108	110	113	94	85	51	21	9	741
26 Feedwater to AWPf	799	721	800	539	581	566	585	572	549	800	773	800	8,086
Subtotal- all waters (including secondary effluent)	1,260	1,376	1,829	2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,455	1,169	24,644

27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL (2009-2013) ¹⁵	1,785	1,219	1,141	420	88	49	27	34	114	859	1,314	1,759	8,809
28 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED DIVERSIONS TO CSIP/AWT/RUWAP ¹⁶	552	308	47	0	0	0	0	0	0	0	313	614	1,833
29 NEW SUPPLIES IN EXCESS OF AWT DEMANDS FOR GWR ¹⁷	(771)	(702)	(767)	249	245	480	353	319	162	(738)	(752)	(791)	(2,714)
30 AWT BRINE TO OCEAN OUTFALL	152	137	152	102	110	108	111	109	104	152	147	152	1,536

Notes

- 1 Presumes all facilities associated with diversions are completed, including SVRP modifications.
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
- 4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.
- 5 Rainfall from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015. Pond area presumed to be Ponds 1,2, 3 + Aeration lagoon. No rainfall/evaporation or storage assigned to drying beds.
- 6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 2015.
- 7 Table 4, Ibid.
- 8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RIBs or drying beds or flow can be diverted to the RTP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).
- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right applcation 32263B. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
- 11 Water right application 32263C. Max. diversion = 3 cfs. Removed from project portfolio during water rights process. See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.
- 12 Includes secondary effluent wastewater currently used to produce recycled water at the Salinas Valley Reclamation Project (SVRP), and additional amounts which may be used during periods of low demand (<5 mgd) with the proposed improvements to the SVRP.
- 13 New source waters not used by AWPf will be available to SVRP for CSIP.
- 14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFY additional product water from the GWR Project AWTf during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.
- 15 Average monthly RTP discharge, 2009-2013 (reported by M1W).
- 16 Secondary treated municipal effluent not used for SVRP or the AWPf.
- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

<div>Table 10: Source Water Analysis for the Pure Water Monterey Groundwater Replenishment Project</div> <div>Diversion Pattern for a Normal Water Year with a Full Reserve</div>													
All facilities built ¹ - average water year conditions - all flows in acre-feet													10/14/2019
SOURCES	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Existing RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,764
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	82
New Source Water													
City of Salinas													
1 Salinas Agricultural Wash Water ²	156	158	201	307	311	391	435	444	367	410	329	223	3,732
Agricultural Wash Water (AWW) to Ponds ³	156	158	201	0	0	0	0	0	0	410	329	223	1,477
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,255
2 Salinas Urban Storm Water Runoff ⁴	52	41	34	16	2	0	0	0	2	8	23	47	225
Urban runoff to ponds	52	41	34	0	0	0	0	0	0	8	23	47	205
Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	20
3 Rainfall (on SIWTF, 121 acre pond area) ⁵	26	24	21	11	3	1	0	0	2	6	14	24	132
4 Evaporation (from SIWTF, 121 acre pond area) ⁶	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251)
5 Percolation ⁷	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257)
6 SIWTF pond storage balance ⁸	684	763	847	647	362	0	0	0	0	253	466	605	
7 Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	172	0	0	0	0	0	0	304
8 AWW and Salinas Runoff to RTP	0	0	0	355	413	563	435	444	369	0	0	0	2,579
Water Rights Applications to SWRCB													
9 Blanco Drain ⁹	0	0	0	252	225	274	277	244	184	0	0	0	1,456
10 Reclamation Ditch at Davis Road ¹⁰	0	0	0	106	79	99	113	109	72	0	0	0	578
11 Tembladero Slough at Castroville ¹¹	0	0	0	0	0	0	0	0	0	0	0	0	0
12 City of Monterey - Diversion at Lake El Estero	0	0	0	5	1	0	0	0	1	0	0	0	7
13 Subtotal New Waters Available	0	0	0	718	718	936	825	797	626	0	0	0	4,620
Total Projected Water Supply													
DEMANDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Average SVRP deliveries to CSIP (2009-2013)	13	459	726	1,376	1,763	1,750	1,866	1,854	1,698	984	448	18	12,955
14 FIVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4,272
TOTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,227
15 FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPf	367	331	367	355	367	355	367	367	355	367	355	367	4,320
16 FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE (200 AFY AWTf PRODUCT WATER) ¹⁴	0	0	0							0	0	0	0
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
17 FEEDWATER TO AWPf FOR MCWD RUWAP ¹⁸	28	19	33	70	108	110	113	94	85	51	21	9	741
18 TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	757	683	757	539	581	566	585	572	549	758	733	758	7,839
Total Projected Water Demand													
Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
19 Secondary effluent to SVRP for CSIP ¹²	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,750
20 New sources available to CSIP ¹³	0	0	0	249	245	480	353	319	162	0	0	0	1,808
21 Total Supply to CSIP	461	654	1,030	1,984	1,993	2,173	2,138	2,121	1,894	1,059	681	370	16,558
Net CSIP Increase													3,603
22 Surface waters at RTP to AWPf	0	0	0	114	106	101	105	111	109	0	0	0	646
23 Secondary effluent to AWPf	729	664	724	0	0	0	0	0	0	707	712	749	4,285
24 AWW and Salinas urban runoff to AWPf	0	0	0	355	367	355	367	367	355	0	0	0	2,166
25 Secondary effluent to AWPf for MCWD RUWAP	28	19	33	70	108	110	113	94	85	51	21	9	741
26 Feedwater to AWPf	757	683	757	539	581	566	585	572	549	758	733	758	7,839
Subtotal- all waters (including secondary effluent)	1,218	1,338	1,787	2,523	2,574	2,739	2,723	2,692	2,443	1,818	1,414	1,127	24,397
27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL (2009-2013) ¹⁵	1,785	1,219	1,141	420	88	49	27	34	114	859	1,314	1,759	8,809
28 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED DIVERSIONS TO CSIP/AWTf/RUWAP ¹⁶	594	346	90	0	0	0	0	0	0	31	354	656	2,070
29 NEW SUPPLIES IN EXCESS OF AWT DEMANDS FOR GWR ¹⁷	(729)	(664)	(724)	249	245	480	353	319	162	(707)	(712)	(749)	(2,477)
30 AWT BRINE TO OCEAN OUTFALL	144	130	144	102	110	108	111	109	104	144	139	144	1,489
Notes													
1 Presumes all facilities associated with diversions are completed, including SVRP modifications.													
2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.													
3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.													
4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.													
5 Rainfall from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015. Pond area presumed to be Ponds 1,2, 3 + Aeration lagoon. No rainfall/evaporation or storage assigned to drying beds.													
6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 2015.													
7 Table 4, Ibid.													
8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RIBs or drying beds or flow can be diverted to the RTP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).													
9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376													
10 Water right applcation 32263B. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377													
11 Water right application 32263C. Max. diversion = 3 cfs. Removed from project portfolio during water rights process. See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.													
12 Includes secondary effluent wastewater currently used to produce recycled water at the Salinas Valley Reclamation Project (SVRP), and additional amounts which may be used during periods of low demand (<5 mgd) with the proposed improvements to the SVRP.													
13 New source waters not used by AWPf will be available to SVRP for CSIP.													
14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFY additional product water from the GWR Project AWTf during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.													
15 Average monthly RTP discharge, 2009-2013 (reported by M1W).													
16 Secondary treated municipal effluent not used for SVRP or the AWPf.													
17 Excess is calculated as Line 13 minus Lines 15 & 16													
18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.													

Table 11: Source Water Analysis for the Pure Water Monterey Groundwater Replenishment Project

Diversion Pattern for a Drought Year, Starting with a Full Reserve

All facilities built ¹ - average water year conditions - all flows in acre-feet												10/14/2019	
<u>SOURCES</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
Minimum Year RTP Inflows (2013)	1,725	1,494	1,645	1,657	1,722	1,675	1,748	1,773	1,715	1,690	1,634	1,612	20,090
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	82

New Source Water

City of Salinas													
1 Salinas Agricultural Wash Water ²	156	158	201	307	311	391	435	444	367	410	329	223	3,732
Agricultural Wash Water (AWW) to Ponds ³	156	158	201	0	0	0	0	0	0	410	329	223	1,477
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,255
2 Salinas Urban Storm Water Runoff ⁴	17	14	11	5	1	0	0	0	1	3	8	16	76
Urban runoff to ponds	17	14	11	0	0	0	0	0	0	3	8	16	69
Urban runoff to RTP	0	0	0	5	1	0	0	0	1	0	0	0	7
3 Rainfall (on SIWTF, 121 acre pond area) ⁵	26	24	21	11	3	1	0	0	2	6	14	24	132
4 Evaporation (from SIWTF, 121 acre pond area) ⁶	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251)
5 Percolation ⁷	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257)
6 SIWTF pond storage balance ⁸	598	650	711	511	226	0	0	0	0	248	446	554	
7 Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	36	0	0	0	0	0	0	168
8 AWW and Salinas Runoff to RTP	0	0	0	344	412	427	435	444	368	0	0	0	2,430
Water Rights Applications to SWRCB													
9 Blanco Drain ⁹	0	0	246	252	225	274	277	244	184	168	133	0	2,003
10 Reclamation Ditch at Davis Road ¹⁰	0	0	70	106	79	99	113	109	72	65	89	0	802
11 Tembladero Slough at Castroville ¹¹	0	0	0	0	0	0	0	0	0	0	0	0	0
12 City of Monterey - Diversion at Lake El Estero	0	0	14	5	1	0	0	0	1	4	10	0	35
13 Subtotal New Waters Available	0	0	330	707	717	800	825	797	625	237	232	0	5,270
Total Projected Water Supply	1,739	1,499	1,985	2,373	2,444	2,479	2,578	2,578	2,345	1,931	1,871	1,619	25,442

DEMANDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
Max Year SVRP deliveries to CSIP (2013)	0	692	1,558	1,669	1,799	1,675	1,786	1,803	1,725	1,548	1,127	88	15,469
14 PEAK CSIP AREA WELL WATER USE (10/2013-09/2014)	509	9	221	242	1,197	1,261	1,303	1,025	453	165	35	730	7,150
TOTAL CSIP Demand (excludes SRDF use)	509	701	1,779	1,911	2,996	2,936	3,089	2,828	2,178	1,713	1,162	818	22,619

15 FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPf	367	331	367	133	137	133	137	137	133	367	355	367	2,963
16 FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE (200 AFY AWTf PRODUCT WATER) ¹⁴	0	0	0							0	0	0	0
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
17 FEEDWATER TO AWPf FOR MCWD RUWAP ¹⁸	28	19	33	70	108	110	113	94	85	51	21	9	741
18 TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	757	683	757	317	351	344	355	342	327	758	733	758	6,482

Total Projected Water Demand	1,266	1,384	2,537	2,228	3,348	3,280	3,444	3,170	2,505	2,471	1,894	1,575	29,102
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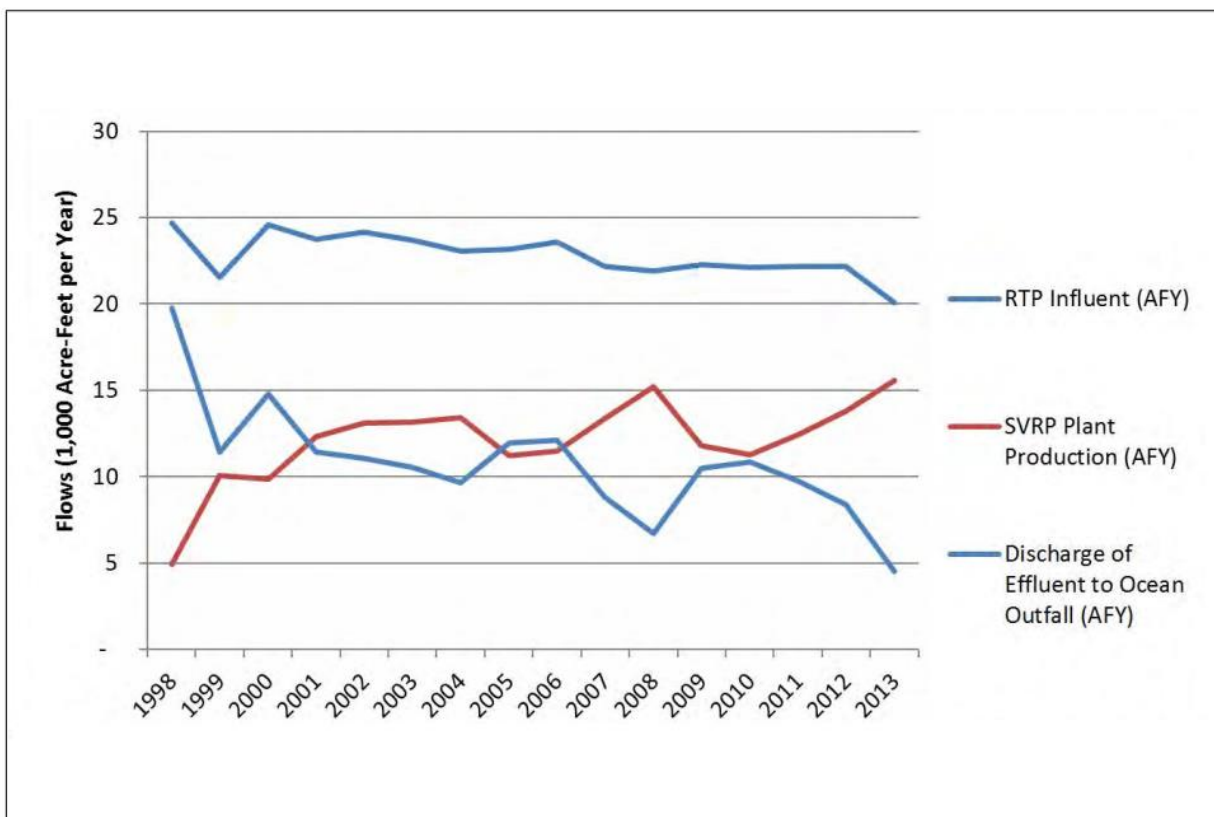
Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
19 Secondary effluent to SVRP for CSIP ¹²	509	701	1,227	1,596	1,619	1,569	1,640	1,687	1,635	1,173	1,138	818	15,312
20 New sources available to CSIP ¹³	0	0	0	460	474	567	583	549	383	0	0	0	3,015
21 Total Supply to CSIP	509	701	1,227	2,056	2,093	2,136	2,223	2,236	2,018	1,173	1,138	818	18,328
Net CSIP Increase													2,858
22 Surface waters at RTP to AWPf	0	0	330	114	106	101	105	111	109	237	232	0	1,445
23 Secondary effluent to AWPf	729	664	394	0	0	0	0	0	0	471	480	749	3,487
24 AWW and Salinas urban runoff to AWPf	0	0	0	133	137	133	137	137	133	0	0	0	809
25 Secondary effluent to AWPf for MCWD RUWAP	28	19	33	70	108	110	113	94	85	51	21	9	741
26 Feedwater to AWPf	757	683	757	317	351	344	355	342	327	758	733	758	6,482
Subtotal- all waters (including secondary effluent)	1,266	1,384	1,985	2,373	2,444	2,479	2,578	2,578	2,345	1,931	1,871	1,575	24,810

27 DRY YEAR WASTEWATER EFFLUENT TO OCEAN OUTFALL (2013) ¹⁵	1,725	802	87	0	0	0	0	0	0	142	507	1,607	4,870
28 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED DIVERSIONS TO CSIP/AWT/RUWAP ¹⁶	473	115	0	0	0	0	0	0	0	0	0	43	632
29 NEW SUPPLIES IN EXCESS OF AWT DEMANDS FOR GWR ¹⁷	(729)	(664)	(394)	460	474	567	583	549	383	(471)	(480)	(749)	(471)
30 AWT BRINE TO OCEAN OUTFALL	144	130	144	60	67	65	68	65	62	144	139	144	1,232

- Notes
- 1 Presumes all facilities associated with diversions are completed, including SVRP modifications.
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
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- 7 Table 4, Ibid.
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- 14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFY additional product water from the GWR Project AWTf during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.
- 15 Average monthly RTP discharge, 2009-2013 (reported by M1W).
- 16 Secondary treated municipal effluent not used for SVRP or the AWPf.
- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

EXHIBIT 3

Volume I – Consolidated Final PWM EIR, January 2016 - Figure 2-9
Historic Regional Treatment Plant Flows



Historic Regional Treatment Plant Flows

April 2015

Pure Water Monterey GWR Project
Draft EIR

Figure
2-9

EXHIBIT 4

SEIR Appendices to the M1WS Draft Supplemental EIR 11-7-2019

Appendix E - Water Quality and Statutory Compliance Report- Appendix C – Projected Monthly Flows of Source Waters to the Regional Treatment Plant Influent

10/24/19

Appendix C - Projected Source Water Flows to the RTP

		RTP Source Water Flow Blends by Scenario and Month (flows in ac-ft per month)													
		Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Maximum New Source Waters	Municipal WW	1,578	1,387	1,643	1,598	1,601	1,563	1,609	1,610	1,541	1,563	1,551	1,567	18810	
	Agricultural Wash Water	0	0	0	309	407	477	318	319	307	0	0	0	2137	
	Blanco Drain	209	223	246	252	225	274	277	244	184	168	133	185	2620	
	El Estero	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Tembladero Slough	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Reclamation Ditch	70	66	70	106	79	99	113	109	72	65	89	76	1014	
Winter Peaking Operation	Municipal WW	1,578	1,387	1,643	1,598	1,601	1,563	1,609	1,610	1,541	1,563	1,551	1,567	18810	
	Ag Wash	0	0	0	309	407	477	318	319	307	0	0	0	2137	
	Blanco Drain	0	0	246	252	225	274	277	244	184	168	0	0	1870	
	El Estero	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Tembladero Slough	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Rec Ditch	0	0	70	106	79	99	113	109	72	65	5	0	718	

EXHIBIT 5

Monterey One Water

July 20, 2020 Special Meeting of the Ad-Hoc JPA Revision
Committee

Attachment 3: Table 1 Member Entity Population Revenue and
Account Data

Table 1 - Monterey One Water Member Entity Data

Member Entity	Population	Population Percentage	Avg. Dry Weather Flows (MGD)	Flow Percentage	Revenue Contribution			Revenue Percentage	Accounts			Accounts
					Residential (Monthly)	Commercial (Monthly)	Annual Total		Residential	Commercial	Total	Percentage
Boronda CSD	1,325	0.49%		#	\$ 8,925.20	\$ 2,527.65	\$ 137,434.20	0.51%	424	65	489	0.48%
Castroville/Moss Landing	7,097	2.63%	0.64	3.99%	\$ 50,625.25	\$ 10,690.60	\$ 735,790.20	2.73%	2,405	322	2,727	2.65%
County of Monterey*												
Del Rey Oaks	1,662	0.62%		+	\$ 14,970.80	\$ 1,310.70	\$ 195,378.00	0.73%	712	59	771	0.75%
MCWD	28,233	10.48%	2.09	13.02%	\$ 264,543.95	\$ 29,920.27	\$ 3,533,570.64	13.13%	12,569	737	13,306	12.93%
Monterey	28,170	10.45%	1.97	12.27%	\$ 269,517.00	\$ 103,043.34	\$ 4,470,724.08	16.61%	12,828	2,973	15,801	15.36%
Pacific Grove	15,265	5.66%	1.15	7.17%	\$ 168,139.50	\$ 25,798.91	\$ 2,327,260.92	8.65%	7,998	1,009	9,007	8.76%
Salinas	162,222	60.20%	8.39	52.27%	\$ 906,380.10	\$ 179,299.36	\$ 13,028,153.52	48.41%	43,074	8,339	51,413	49.98%
Sand City	385	0.14%		+	\$ 3,692.25	\$ 4,227.85	\$ 95,041.20	0.35%	177	242	419	0.41%
Seaside	33,537	12.45%	1.81	11.28%	\$ 172,475.60	\$ 26,357.76	\$ 2,386,000.32	8.87%	8,200	736	8,936	8.69%
TOTALS	269,474		16.05		\$ 1,859,269.65	\$ 383,176.44	\$ 26,909,353.08		88,387	14,482	102,869	

Notes - Residential totals include vacant residences
Population Numbers are per the department of Finance as of 1/1/20
Flows are averages for January through June 2020
* - Monterey County data needs to be confirmed prior to inclusion in this table
- Boranda flows accounted for in Salinas
+ - Del Rey Oaks and Sand City flows accounted for in Seaside

EXHIBIT 6 - Water Use Figure

SEIR Appendix O - Supply and Demand for Water on the Monterey Peninsula

FINAL

March 13, 2020, Page 7

Figure 1
Annual Water Production for Customer Service (Demand)
Last 21 Years
(Acre-Feet)

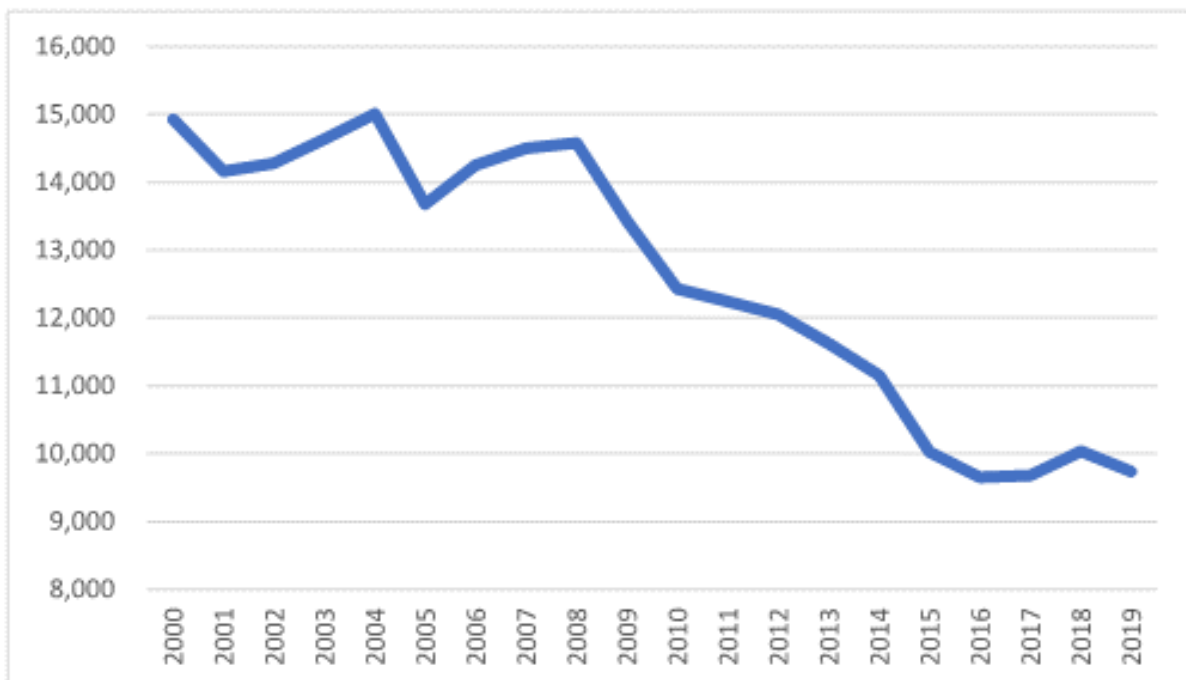


EXHIBIT 7 - Reclamation Ditch Flow

USGS 5 year Monthly Discharge Data from Reclamation Ditch Monitoring Station at Davis Road

USGS 11152650 RECLAMATION DITCH NR SALINAS CA

Available data for this site Time-series: Monthly statistics

Monterey County, California Hydrologic Unit Code 18060015 Latitude 36°42'18", Longitude 121°42'14" NAD27 Drainage area 53.2 square miles Gage datum 16 feet above NGVD29	Output formats HTML table of all data Tab-separated data Reselect output format
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00060, Discharge, cubic feet per second,												
YEAR	Monthly mean in ft ³ /s (Calculation Period: 2015-01-01 -> 2020-03-31)											
	Period-of-record for statistical calculation restricted by user											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	0.978	4.63	1.75	2.92	1.58	1.12	0.951	1.37	0.933	0.988	9.37	18.9
2016	69.3	8.66	72.1	4.42	2.78	2.07	2.15	1.86	1.48	7.69	7.44	16.8
2017	191.1	194.6	37.1	12.3	3.29	2.35	1.96	1.78	1.05	0.965	2.13	0.821
2018	10.6	1.83	17.5	15.2	2.23	2.32	2.28	2.04	1.23	1.59	15.3	15.4
2019	10.9	107.8	24.7	3.77	10.1	3.36	2.93	2.73	1.77	1.05	3.96	42.9
2020	7.8	1.78	16.4									
Mean of monthly Discharge	48	53	28	7.7	4	2.2	2.1	2	1.3	2.5	7.6	19
** No Incomplete data have been used for statistical calculation												

USGS 10 year Monthly Discharge Data from Reclamation Ditch Monitoring Station at Davis Road

USGS 11152650 RECLAMATION DITCH NR SALINAS CA

Available data for this site Time-series: Monthly statistics

Monterey County, California Hydrologic Unit Code 18060015 Latitude 36°42'18", Longitude 121°42'14" NAD27 Drainage area 53.2 square miles Gage datum 16 feet above NGVD29	Output formats HTML table of all data Tab-separated data Reselect output format
--	---

00060, Discharge, cubic feet per second,												
Monthly mean in ft3/s (Calculation Period: 2010-01-01 -> 2020-04-30)												
YEAR	Period-of-record for statistical calculation restricted by user											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	36.7	29.1	43.3	29	5.6	3.93	3.93	3.21	2.11	2.89	12.2	23.8
2011	19.7	32.7	75.8	9.47	5.24	4.6	3.71	2.9	2.28	7.78	7.67	1.24
2012	10.3	3.39	17.9	17.1	2.38	3.11	2.33	3.6	1.44	1.57	9.77	45.8
2013	15.2	3.64	2.68	2.07	1.52	1.47	1.57	1.63	1.08	0.964	1.42	1.38
2014	1.4	13.3	10.6	4.59	1.23	1.23	1.33	1.54	1.39	2.45	7.12	74.5
2015	0.978	4.63	1.75	2.92	1.58	1.12	0.951	1.37	0.933	0.988	9.37	18.9
2016	69.3	8.66	72.1	4.42	2.78	2.07	2.15	1.86	1.48	7.69	7.44	16.8
2017	191.1	194.6	37.1	12.3	3.29	2.35	1.96	1.78	1.05	0.965	2.13	0.821
2018	10.6	1.83	17.5	15.2	2.23	2.32	2.28	2.04	1.23	1.59	15.3	15.4
2019	10.9	107.8	24.7	3.77	10.1	3.36	2.93	2.73	1.77	1.05	3.96	42.9
2020	7.8	1.78	16.4	13.6								
Mean of monthly Discharge	34	36	29	10	3.6	2.6	2.3	2.3	1.5	2.8	7.6	24
** No Incomplete data have been used for statistical calculation												

EXHIBIT 2

California American Water

Peer Review of August 20, 2020 Letter from M1W to CCC

**Prepared By: Kevin Alexander, P.E.
Hazen and Sawyer - August 23, 2020**

This memorandum addresses Monterey One Water's (M1W) August 20, 2020 letter to Tom Luster of the California Coastal Commission, which responds to Hazen and Sawyer's August 11, 2020 Peer Review of Supply and Demand for the Monterey Peninsula. Hazen has reviewed M1W's response and offers the following comments:

- As an initial matter, Hazen notes its concern with M1W's tone and use of terms like "inaccuracies" and "falsify" to describe Hazen's analysis. All of the assumptions that are used in Hazen's analysis are explained clearly and directly. While M1W may dispute the basis for those assumptions, none of them amount to either inaccuracies or falsification of information.
- M1W and the Monterey Peninsula Water Management District (MPWMD), as the proponents of the Pure Water Monterey Expansion project (PWM Expansion), have the burden to demonstrate the PWM Expansion will have sufficient water supply to meet demand. We do not agree that they have provided adequate information regarding the availability and reliability of source waters for the PWM Expansion to be considered a resilient sustainable supply source for the Peninsula.
- M1W misrepresents that the August 11 Hazen and Sawyer Memorandum contains inaccurate analyses and conclusions. Hazen's analysis was based on the information provided in the SEIR for the PWM Expansion by M1W and MPMWD. To the extent that information is inaccurate, such inaccuracies are that of M1W and MPMWD. For example, Hazen's memorandum did not (and could not) include the new wastewater flow information provided by M1W in its August 20 letter because M1W has not made these numbers publicly available until now. Despite providing wastewater flow information for 2014 to 2019 for the first time, M1W still has not provided evidence supporting these numbers and instead requests that the Coastal Commission take the numbers at face value.
 - Nevertheless, the new wastewater flow numbers support Hazen's analysis and further demonstrate that there are insufficient source waters for the PWM Expansion.
 - Further, if this flow information was readily available to M1W, why did M1W not evaluate it in the SEIR for the PWM Expansion? The flow information represents significant new information that should have been made available to the public, subject to review and analyzed by M1W in the SEIR.
- By M1W's own admission, M1W states that the wastewater influent data in the SEIR was incomplete. Hazen did a thorough review and found multiple discrepancies and

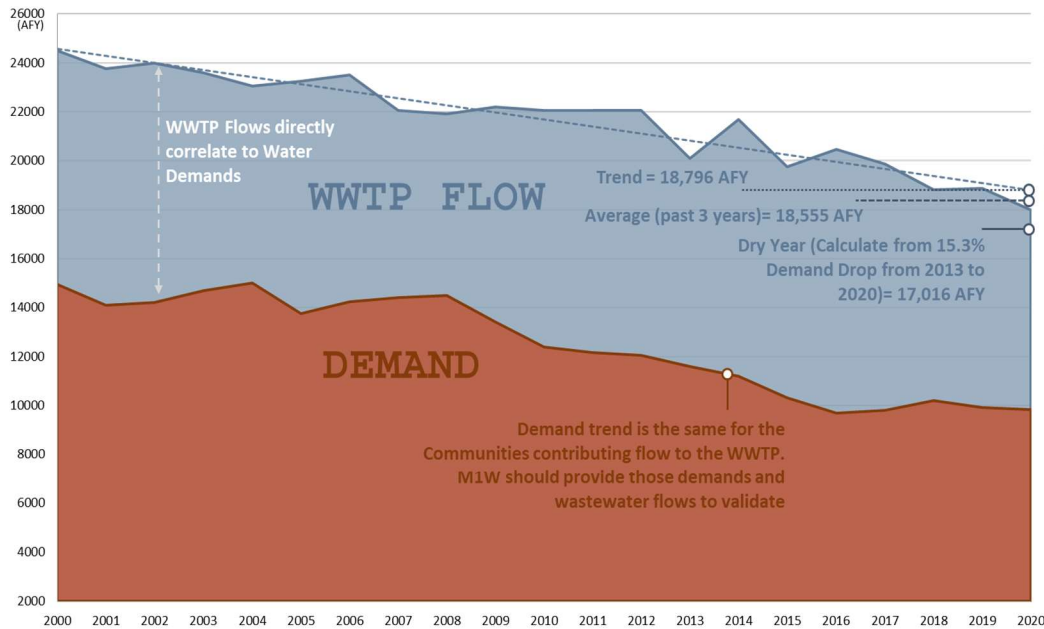
inaccuracies in the wastewater flows used throughout the SEIR. Hazen's review and analysis clearly shows that the accurate wastewater flows were either not provided or updated in a transparent manner to the community.

- Wastewater flow data after 2013 was not used in M1W's analysis of the PWM Expansion and was never considered in the SEIR, despite the apparent availability of this information to M1W. Rather than rely solely on old data, Hazen's peer review of M1W's analysis utilized data for 2018 from Appendix E of the PWM Expansion Draft SEIR that demonstrated flows had been reduced to 18,810 AF, and additional data presented by M1W to its Ad-Hoc JPA Revision Committee on July 20, 2020, which indicated that since the beginning of 2020 wastewater flows have been reduced to 17,980 AF (which is a decrease of 2,110 AF from the 2013 drought year flow of 20,090 AF utilized in the SEIR). The reduction of wastewater flows to 17,980 AF is not disputed by M1W. Absent additional information from M1W, the 17,980 AF number presented to M1W's Ad-Hoc JPA Revision Committee is the most current flow information available.
 - Hazen's analysis utilized the 17,980 AF number for non-drought conditions, and the 17,016 AF number for drought conditions. Hazen did not solely rely on the 17,016 AF number as M1W claims. Nonetheless, the consideration of flow at 17,016 AF is important because, as explained in Hazen's prior memo, prolonged drought conditions are likely if not certain to occur.
 - The SEIR for the PWM Expansion has never been updated to account for either the 2018 flow of 18,810 AF, or the 2020 flow of 17,980 AF, much less the new flow data that M1W has just provided. When accounting for the new flow information, the slope of the decreased flows since 2013 is very similar to the declining trend that Hazen previously projected (see Updated Figure 3). In fact, M1W's new flow information is confirmation of the trend that Hazen presented and further demonstrates that source water for the PWM Expansion is inadequate.
- When M1W's wastewater flow information for 2018 to 2020 is evaluated on a three year basis, the three year average is 18,555 AF, which is only 500 AF above Hazen's prior projection of 17,980 AF for 2020, rather than the 3,000 AF difference that M1W claims.
- Even using M1W's own numbers and ignoring the 17,980 AF number that M1W previously presented, Hazen's conclusions remain accurate. Hazen's approach throughout used actual information provided to the public by M1W in the SEIR for the PWM Expansion and did not use assumptions as was done by MPMWD and M1W.
 - Any extrapolations, interpretations, calculations and projections made by Hazen are based upon similar mathematical approaches used throughout the SEIR to be consistent. Figures 3, 4 and 5 and Tables 1 and 2 from Hazen and

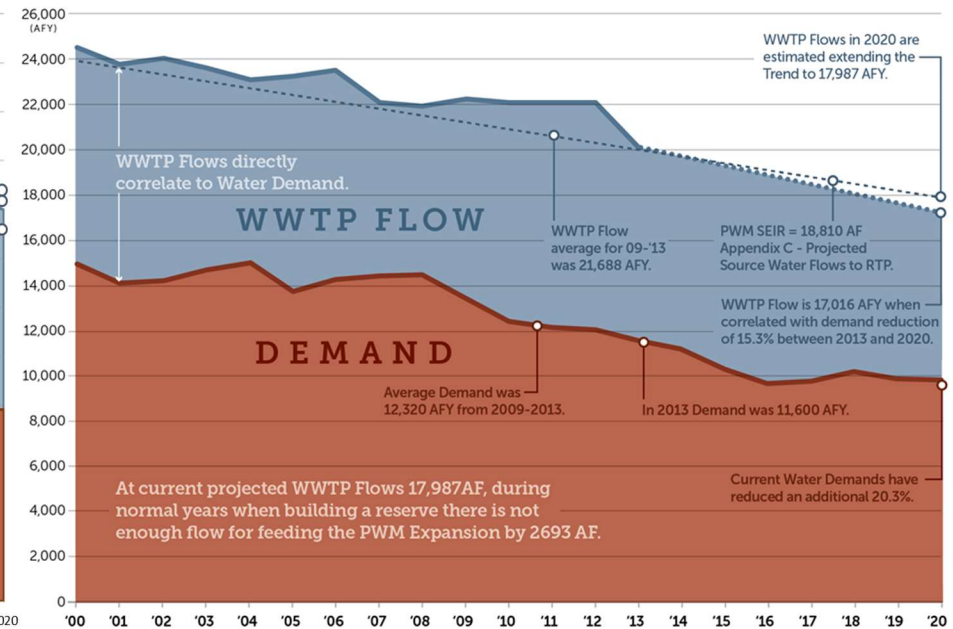
Sawyer's August 11 Memorandum have been updated below to account for the revised average flow of 18,555 AFY using the last 3 years of data. Even based on this updated information, Hazen's prior conclusions remain valid and it is evident that there is not enough wastewater flow to support the PWM Phase One and the PWM Expansion as a reliable source of water supply for the Peninsula. In particular, there will be deficits over the summer months – particularly in dry years – given the existing commitments of source waters that are proposed for PWM Phase One and PWM Expansion. M1W has not provided any evidence to counter these real deficits or explain how they can be avoided.

- The deficits that Hazen has demonstrated – using M1W's own updated numbers – show that there is not sufficient source water for PWM Phase One and PWM Expansion to produce their promised product water to CalAm's customers of 3,500 AFY and 2,250 AFY, respectively.
- In addition, M1W has provided no evidence that Hazen's projections of reduced Reclamation Ditch flows are incorrect. Even though Hazen has serious concerns with the amount of other surface water flows from other sources purportedly available to the PWM Expansion, Hazen conservatively only made reductions as to Reclamation Ditch flows because there was publicly available evidence from USGS that Reclamation Ditch flows were lower than presented in the SEIR.

**Updated Figure 3:
Reduced Demand = Reduced WWTP Flow
(=Reduced Recycled Water Supply)**



**Figure 3:
Reduced Demand = Reduced WWTP Flow
(=Reduced Recycled Water Supply)**



Updated TABLE 1 – IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 – 11 FROM SEIR APPX. I

<i>Supply and Demand</i> <i>in Acre-Ft</i>	Original SEIR Appx. I Data				Updated Appx. I Data			
	Table 8	Table 9	Table10	Table11	Table 8 Updated	Table 9 Updated	Table10 Updated	Table11 Updated
SUPPLY								
WWTP Flow ^a	21764	21764	21764	20090	18555	18555	18555	17016
Domestic Flows	82	82	82	82	82	82	82	82
New Sources ^b	2579	2579	2579	2430	2579	2579	2579	2430
Surface Water ^c	3721	2052	2041	2840	3641	1972	1961	2304
TOTAL	28146	26477	26466	25442	24857	23188	23177	21832
DEMAND								
CSIP and CSIP Well	17227	17227	17227	22619	17227	17227	17227	22619
PWM	4320	4320	4320	2963	4320	4320	4320	2963
PWM drought	248	248	0	0	248	248	0	0
PWM Expansion	2778	2778	2778	2778	2778	2778	2778	2778
RUWAP	741	741	741	741	741	741	741	741
TOTAL	25314	25314	25066	29101	25314	25314	25066	29101
Annual Supply Excess^d	2833	1164	1400	-3659	-457	-2126	-1889	-7269

TABLE 1 – IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 – 11 FROM SEIR APPX. I

<i>Supply and Demand</i> <i>in Acre-Ft</i>	Original SEIR Appx. I Data				Updated Appx. I Data			
	Table 8	Table 9	Table10	Table11	Table 8 Updated	Table 9 Updated	Table10 Updated	Table11 Updated
SUPPLY								
WWTP Flow ^a	21764	21764	21764	20090	17987	17987	17987	17016
Domestic Flows	82	82	82	82	82	82	82	82
New Sources ^b	2579	2579	2579	2430	2579	2579	2579	2430
Surface Water ^c	3721	2052	2041	2840	3641	1972	1961	2304
TOTAL	28146	26477	26466	25442	24289	22620	22609	21832
DEMAND								
CSIP and CSIP Well	17227	17227	17227	22619	17227	17227	17227	22619
PWM	4320	4320	4320	2963	4320	4320	4320	2963
PWM drought	248	248	0	0	248	248	0	0
PWM Expansion	2778	2778	2778	2778	2778	2778	2778	2778
RUWAP	741	741	741	741	741	741	741	741
TOTAL	25314	25314	25066	29101	25314	25314	25066	29102
Annual Supply Excess^d	2833	1164	1400	-3659	-1025	-2693	-2457	-7270

Updated TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

<i>Flow Balance – in Acre-Ft</i>	Table 8	Table 9	Table 10	Table 11	Table 8 Update	Table 9 Update	Table 10 Update	Table 11 Update
Flow to CSIP + CSIP Well								
Pumping	17227	17227	17227	22619	17227	17227	17227	21091 ^e
Flow to PWM ^f	4320	4320	4320	2963	4320	4320	4320	0
Flow to PWM Drought	248	248	0	0	248	248	0	0
Flow to PWME ^g	2778	2778	2778	2778	1753	84	321	0
Flow to RUWAP	741	741	741	741	741	741	741	741
Actual Use Flows^h	25314	25314	25066	29101	24289	22620	22609	21832
Flow to ASR ⁱ	5950	5950	5750	4650	5120	3768	3759	0
Concentrate Flow to Outfall ^j	1536	1536	1489	1232	1342	1025	1023	141
Deficit To ASR	0	0	0	-1100	-370	-1722	-1530	-4650

TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

<i>Flow Balance – in Acre-Ft</i>	Table 8	Table 9	Table 10	Table 11	Table 8 Update	Table 9 Update	Table 10 Update	Table 11 Update
Flow to CSIP + CSIP Well								
Pumping	17227	17227	17227	22619	17227	17227	17227	21091 ^e
Flow to PWM ^f	4320	4320	4320	2963	4320	4320	4320	0
Flow to PWM Drought	248	248	0	0	248	248	0	0
Flow to PWME ^g	2778	2778	2778	2778	1753	84	321	0
Flow to RUWAP	741	741	741	741	741	741	741	741
Actual Use Flows^h	25314	25314	25066	29101	24289	22620	22609	21832
Flow to ASR ⁱ	5950	5950	5750	4650	5120	3768	3759	0
Concentrate Flow to Outfall ^j	1536	1536	1489	1232	1342	1025	1023	141
Deficit To ASR	0	0	0	-1100	-830	-2182	-1991	-4651

Updated Figure 4: Impacts of Demands Exceeding Limited Supplies

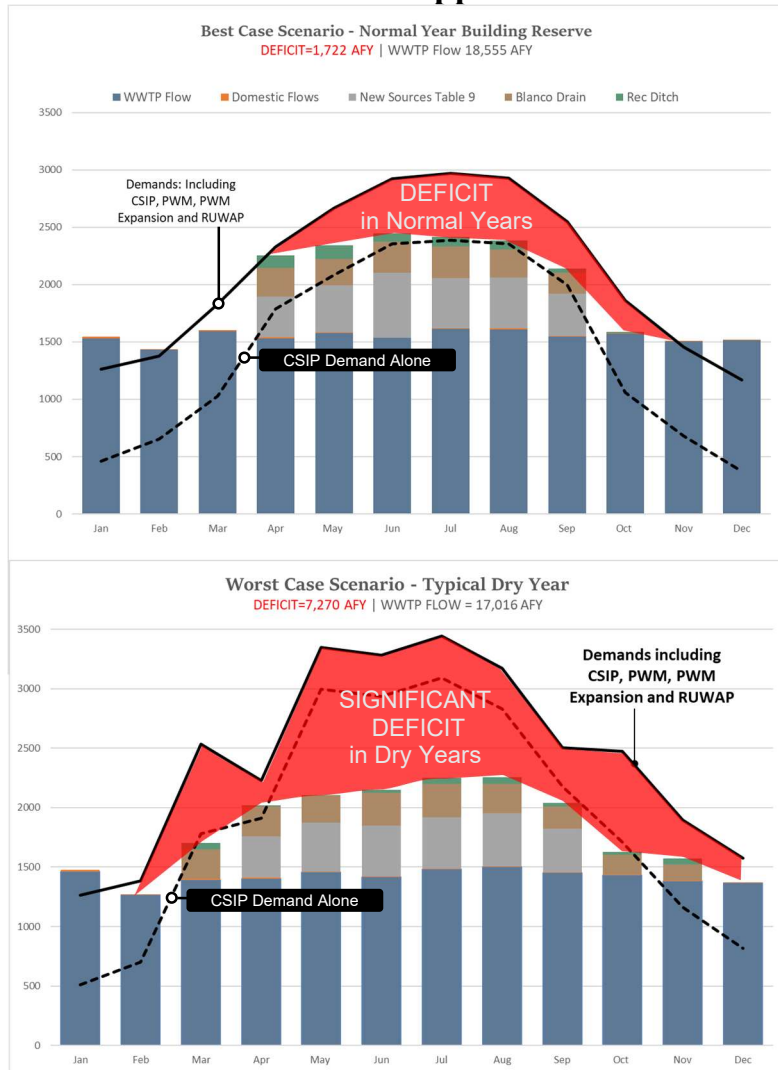
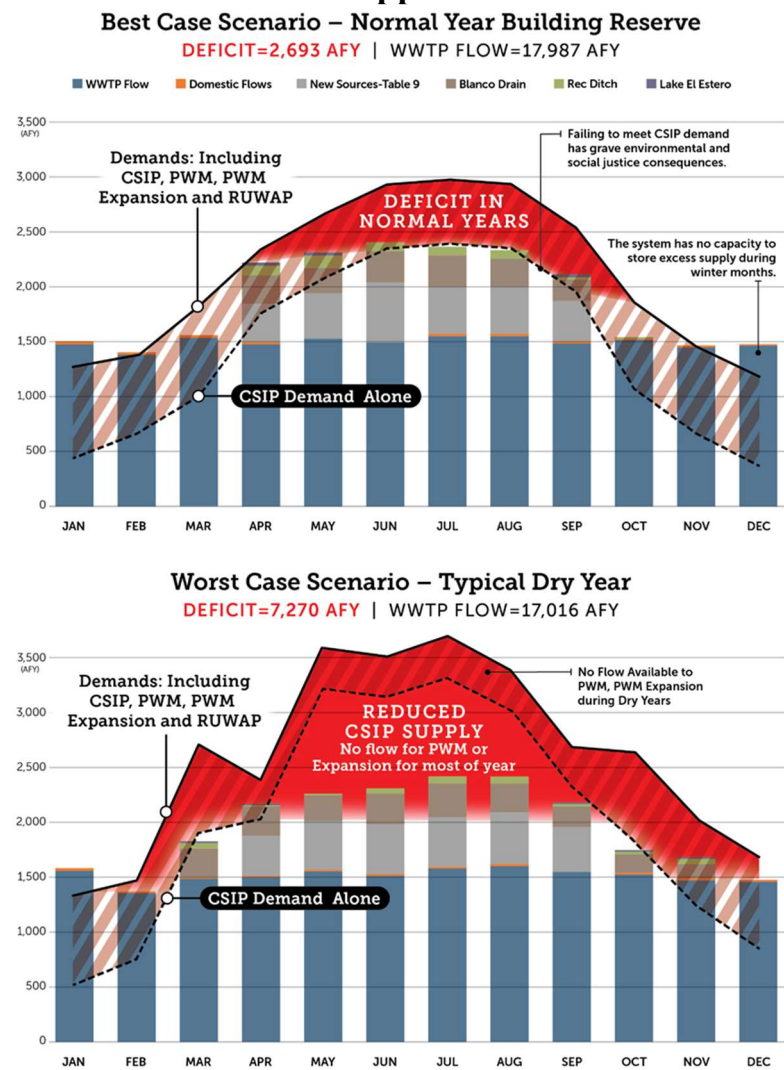


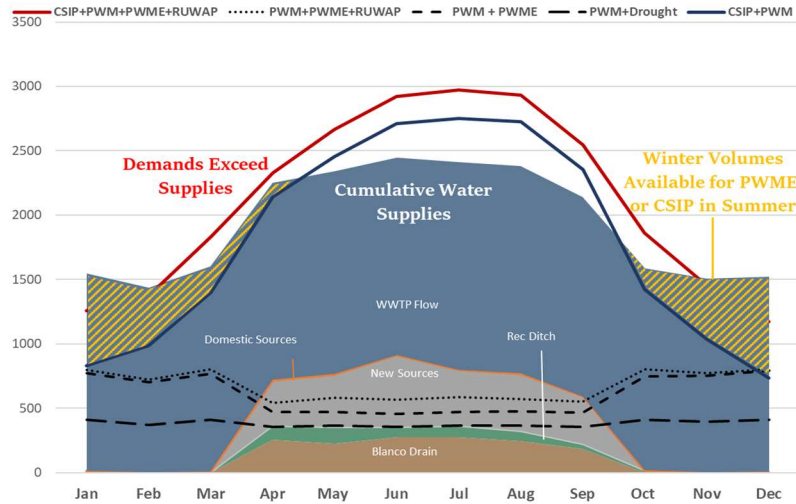
Figure 4: Impacts of Demands Exceeding Limited Supplies



Updated Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario - Normal Year Building Reserve

DEFICIT=1,722 AFY | WWTP Flow 18,555AFY



Worst Case Scenario - Typical Dry Year

DEFICIT = 7,270 AFY | WWTP Flow 17,016AFY

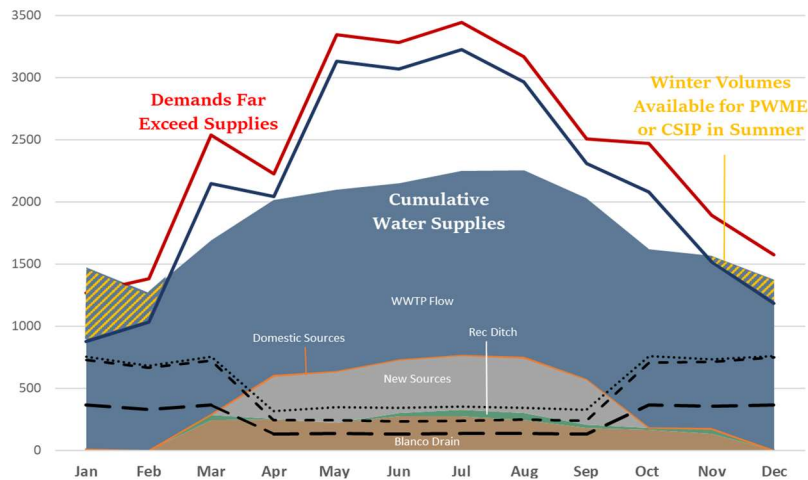
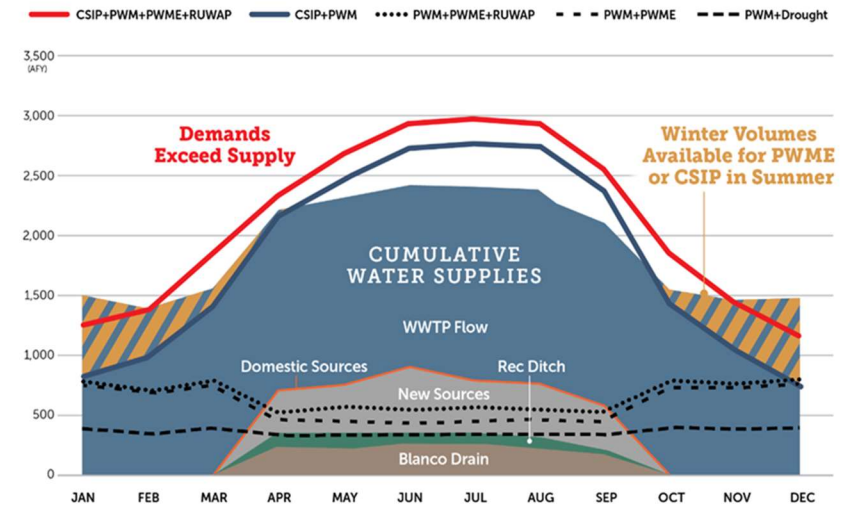


Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario – Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario – Typical Dry Year

DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY

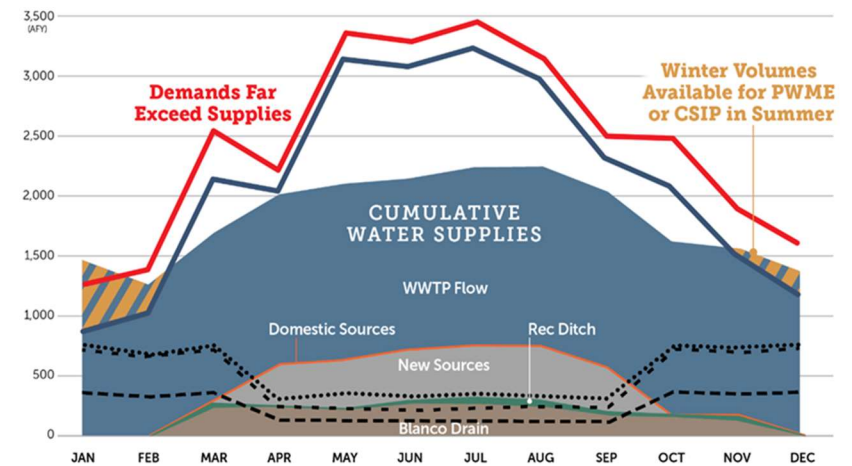


EXHIBIT 3

California American Water

Peer Review of CCC Staff Report, Lon House Report and MCWD Media Statement

**Prepared By: Kevin Alexander, P.E.
Hazen and Sawyer – September 10, 2020**

This memorandum is in response to a review of the September 25, 2020 California Coastal Commission (CCC) Staff Report concerning California-American Water Company's (Cal-Am) proposal to construct and operate the Monterey Peninsula Water Supply Project (Project), the Energy and Water Consulting memorandum by Lon House, PhD. dated April 2020 that was provided to the CCC, and the Media Statement by Marina Coast Water District issued September 9, 2020.

I. RESPONSE TO STAFF REPORT

The following are Hazen's comments on the CCC Report:

- Hazen and Sawyer's August 11, 2020 and August 23, 2020 memoranda demonstrate that water supply and demand analysis provided to the CCC by Monterey One Water (M1W) and Monterey Peninsula Water Management District (MPWMD) relied on outdated wastewater flow data and that M1W and MPWMD were aware that wastewater flows were decreasing. Moreover, outdated and misleading assumptions of 2009 to 2013 wastewater flows were carried throughout the Draft and Final SEIR for the Pure Water Expansion, which indicates that the SEIR analysis of water supply and demand was inadequate. In response to Hazen and Sawyer's August 11 memorandum demonstrating these inadequacies, on August 20, 2020, M1W provided for the first time its purported wastewater flows from 2014 to 2019 (though without the underlying data). Hazen and Sawyer's August 23 memorandum reviewed the 2014 to 2019 flow information provided by M1W and confirmed that wastewater flows are insufficient to supply the Pure Water Expansion as previously concluded by Hazen.

The Staff Report largely ignores Hazen's August 11, 2020 and August 23, 2020 memoranda and does not consider M1W's recent flow information. As a result, the Staff Report does not address the significance of Hazen's conclusion that the Pure Water Expansion project simply does not have an adequate source of water supplies for it to produce its promised 2,250 acre-feet per year (afy). It is clear that the CCC staff has not reviewed or relied upon the latest information provided by Hazen or by M1W. Page 7 of the Staff Report states: "However, based on staff's evaluation of technical information provided by Monterey One Water and others, staff believe there is sufficient source water, include at least one certain source – i.e., no less than about 8,000 acre-feet per year of treated wastewater – to provide the approximately 3,000 acre-feet per year the Pure Water Expansion will need to produce its expected 2,250 acre-feet per year and satisfy the service area's water demand."

- The Staff Report is incorrect in stating there is 8,000 acre-feet of wastewater flows available. Although the Draft SEIR indicated that there was approximately 8,000 afy of wastewater effluent available to the ocean outfall in a normal year, the Final SEIR updated this assumption and states that only 5,811 afy is assumed to be available. (Appendix M Table 2.)
- When average flows per year for the past 3 years of 18,555 afy are considered, the 5,811 afy of available wastewater is further reduced to 5,732 acre-feet. When considering the most current data for 2020, wastewater flows are 17,980 acre-feet, which will reduce the available wastewater flow to the ocean outfall to 5,554 acre-feet.
- The current Pure Water project requires 4,320 acre-feet of that wastewater to produce the 3,500 acre-feet of water for Cal-Am's customers, and 4,568 acre-feet of wastewater to produce 3,700 acre-feet when building a drought reserve.
- The Regional Urban Water Augmentation Project (RUWAP) must be supplied from wastewater effluent at 822 acre-feet; however, with backwash flows re-introduced, that flow is reduced to 741 acre-feet.
- Therefore, the remaining amount of wastewater available for the Pure Water Expansion is 5,732 minus 4,568 minus 741, which equals **432 acre-feet**. 432 afy is not sufficient source water for the Pure Water Expansion to produce 2,250 afy. Instead, at least 2,778 afy of source water would be required.
- In Dry Years as noted, the actual wastewater flows are estimated to be substantially less and therefore, no flow is available for the Pure Water Expansion.
- The quantity of source water to supply the Pure Water project and the Pure Water Expansion are evaluated in the Staff Report. However, as noted above, the Staff Report incorrectly relies on the availability of source water base on flawed analysis from M1W and MPWMD without consideration for whether the availability of a given source is documented and reliable year round or during drought. CCC Staff are directed to Appendix M of the SEIR Table 2 and Table 3 for available sources for the Pure Water Expansion. The Staff Report noted that M1W has agreements for more than enough water actually needed to supply the Pure Water Expansion. This conclusion is incorrect based on the methodology and assumptions and Table 2 and 3 of the SEIR Appendix M. Continuing the calculation from above:
 - When all available assumed and estimated flows, including the 432 acre-ft calculated above, according to the Source Water Priority Table 3 in Appendix M of the SEIR are available, there is only 2,297 acre-feet actually available for Pure Water Expansion. The maximum flow that could be produced at best case is 1,860 acre-feet. This assumes all flows from all of the sources "allowed" to feed the Pure Water Expansion are available 100 percent of the time. That flow is further reduced to 1,597 afy if the flows are reduced for the current wastewater

flow of 17,980 afy. The following Table 1 shows the flows from SEIR Appendix M Table 2 used in assessing the available water to the Pure Water Expansion:

TABLE 1

Source Water	Quantity of Water Available to M1W in a Typical Year (Acre Feet Per Year)
Secondary Effluent to Ocean Outfall	432 afy remaining from calculation above. (245 afy if WW flow to ocean outfall is 5,554 based on current year at 17,980 afy)
Reclamation Ditch	0 - (SEIR Appx M, Pg 9) "The new source waters conservatively are not assumed to be available for the Proposed Modification, regardless whether condition precedence are met."
Blanco Drain	0 - (SEIR Appx M, Pg 9) "The new source waters conservatively are not assumed to be available for the Proposed Modification, regardless whether condition precedence are met."
Agricultural Wash Water (AWW)	0 - (SEIR Appx M, Pg 9) "The new source waters conservatively are not assumed to be available for the Proposed Modification, regardless whether condition precedence are met."
Recycle Sump #1	41
Recycle Sump #2	104
Approved PWM Project and MCWD AWWP Backwashes	290
Proposed Modifications AWWP Backwashes (only available for Modifications)	152 at 2250 AFY (36 when producing 528 AFY with current WW flows at 17,980)
SVRP Backwash	515 in 2018 (492 when WW flow reduced from 18,810 to 17,980 in 2020)
Boranda	95
Farmworker Housing	18
M1W's ARWRA Summer Water (ARWRA Section IV 4.01 1(d))	650
SRDF Screening	0 - SEIR Appendix M -Table 2, "SRDF Screening and Salinas IWTF Pond System waters are assumed to not be available."
Salinas IWTF Pond System	0 - SEIR Appendix M -Table 2, "SRDF Screening and Salinas IWTF Pond System waters are assumed to not be available."
Total Available for feed to the M1W AWWP	2,297 (1,971 including current 17,980 WW flow)

- M1W stated in the SEIR Appendix M that its assumptions are conservative. Hazen does not agree, as it is clear there is not enough wastewater flow, since

M1W's own flow information from 2014 to 2019 shows that wastewater flow has declined significantly since 2013, the last year evaluated in the SEIR.

Additionally, the other surface water flows proposed as source water for the Pure Water Expansion are based on unverified flows that were stated to be "assumed and estimated" in the SEIR. (SEIR Appendix M, pp. 7, 9 10 and 12.)

- The "Assumed Flows and Estimated Flows" in SEIR Appendix M do not have backup information that validates the reliability of these flows in recent years or over multiple years. Additionally, according to SEIR Appendix M, Methodology and Assumptions, the Blanco Drain, Reclamation Ditch and Agricultural Wash Water are not included as source water available to the PWM Expansion. These flows, although not part of the source water to the Pure Water Expansion, have not been updated with recent information and the validity, availability and reliability of flow from those supplies even to the existing Pure Water project are speculative.
- Staff Report page 110 states that the August 20, 2020 letter from M1W to the CCC addresses Cal-Am's contentions and clarifies that Cal-Am's concerns about inadequate wastewater were based on incorrect analysis. The Staff Report asserts that Cal-Am's concerns about source water quality are misplaced because the Pure Water Project has treated wastewater from agricultural operations.
 - M1W states that wastewater flows from the Peninsula make up a portion of the influent to the Wastewater Treatment Plant and asserts that because they are only a portion of the flows, the demand reductions are not proof that the wastewater flows are reducing. The data provide by M1W in the August 2020 memorandum clearly reveals otherwise and supports the deficit conclusions in the Hazen Memorandum from August 11, 2020.
 - In an area where demands are weighed down by moratoria, outdoor watering is limited by regulations, and tiered rates are used as a mechanism to drive down, excess use results in water use being closer to wastewater flow since indoor water ends up in the sewer. The contributing agencies to M1W all use such tools to control water demand meaning reductions in demand declines would be similar across the area. Hazen reaffirms its analysis that clearly shows wastewater flows are reduced to the levels predicted in Hazen's August 11, 2020 memorandum. Hazen's August 11 memorandum estimated 17,987 acre-feet of wastewater flow today using a demand corollary. Based on M1W's new flow information, flows are 17,980 acre-feet today.
 - Regarding Water Quality of the source waters, the Draft SEIR Appendix E -Water Quality and Statutory Compliance Report, at Appendix B-1 (2013-2014 test data) used testing procedures for perfluorooctanoic acid and perfluorooctanesulfonate (PFOA/PFOS) compounds that had a higher detection limit than current procedures. M1W was recently added to the list of agencies having to provide updated data for 31 PFOA/PFOS compounds in its effluent and RO concentrate

using updated testing methods that detect such compounds at much lower levels.¹ It should be noted that even with the older test data that the Lake El Estero has PFOA/PFOS compounds at detectable levels. With current regulations for drinking water supplies being much lower, it will be important to understand each source of supply and if the levels will be required to be removed. The RO Technology will remove the compound, however it will end up in the Bay as concentrate at much higher concentrations which could be another issue. This issue has not been evaluated by M1W or the CCC.

- The Staff Report fails to consider the limited availability of ASR. Throughout the 2020 and 2019 MPWMD reports and in the CCC Staff Report there are references to ASR being a proven approach. Hazen would agree with that statement that ASR when used appropriately can be a solution. However, what is not addressed by MPWMD or the SEIR (as noted in the Hazen Memorandum dated August 11, 2020 and August 23, 2020) is that *there must be water available to treat to be able to inject into the aquifer for storage and ultimate recovery*. ASR using excess Carmel River water in the past 15 years has not shown the ability to build adequate storage. In the context of the proposed Pure Water Expansion, there is not enough flow available to build the drought reserve over time let alone meet current demand.
- Regarding startup related issues, the CCC Staff Report references the Orange County Water District (OCWD) Groundwater Replenishment System (GWRS) and notes that the system did not start up at full capacity for various reasons. It should be noted that the reason the system did not produce at the full capacity in the first years of operation is that wastewater flows had dropped at Orange County Sanitation District (OCSD) Wastewater Treatment Plant No. 1 similar to the situation being faced by M1W. That reduction in wastewater flow ultimately forced OCWD to install very large 15 million gallon equalization tanks to capture excess flows during the day to allow the system to operate at nearly full flow at night. The Author of this memorandum was the lead process engineer for OCWD during development of the Phase 1, planning of the Phase 2 and ultimate build out of the GWRS projects for OCWD. Further, the Author is intimately familiar with that system and how it started and continues to operate.
- The Draft and Final SEIR have water supply projections that have not been updated to address lower wastewater flows. The environment will be impacted if MPMWD and M1W divert effluent by Water Right from the CSIP program to the Pure Water projects. No analysis has been provided with regard to how to prioritize CSIP and reducing seawater intrusion from continued groundwater pumping versus supplying the Pure Water project.

¹ State Water Resources Control Board, Water Code Sections 13267 and 13383 Order for the Determination of The Presence of Per and Polyfluoralkyl Substances at Publicly Owned Treatment Works, ORDER WQ 2020-0015-DWQ, Attachment 2, available at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2020/wqo2020_0015_dwq.pdf.

- Table 6 on page 121 of the Staff Report provides a comparison of Cal-Am’s water supply portfolio with Cal-Am’s desalination Project or with the Pure Water Expansion. What is not made clear is what the table looks like when actual available water supplies and updated SEIR Tables 9, 10, and 11 based on the most recent 3 years of wastewater flow data are accounted for. Appendix A below provides that updated accounting. Although Hazen and Sawyer used the same methodology and approaches used to calculate predictions of current and future demand by MPWMD and House, as shown in Appendix A, when ASR is accounted for at a realistic level, the Pure Water Expansion cannot meet MPWMD lowest demand estimate of 10,855 acre-feet per year. Likewise, when WWTP flows and Reclamation Ditch flows are accounted for based on current flow data, the Pure Water Expansion cannot meet 10,855 acre-feet per year demand. When the SEIR tables are updated to account for current WWTP flow and Reclamation Ditch Flow, it is apparent that MPWMD has overestimated supplies. In Appendix A, Updated SEIR Table 9 reveals there is enough flow to produce 528 acre-feet from the Pure Water Expansion. Appendix A, Updated Table 10 would likely never apply because there is not adequate flow to build a reserve. Appendix A, Updated Table 11 reveals that during drought years, there must be 5,311 acre-feet available from ASR that is not actually available because, as explained in the August 11, 2020 report from Hazen and Sawyer, between 1997 and 2019, annual ASR reinjection only reached the 1,300 acre-feet per year twice, averaging only 450 acre-feet per year over a 22 year period. During drought conditions, ASR is essentially unavailable. These are significant issues that MPMWD and M1W must address before the CCC can consider the Pure Water Expansion as a potential alternative to Cal-Am’s Project. The future demand ranges presented in House Table 3 are similar to the demand ranges provided by MPWMD and for the same reasons that the Pure Water Expansion cannot meet MPWMD’s lowest estimate of demand, it is speculative to assume that the demand levels presented by House are attainable.

II. RESPONSE TO LON HOUSE MEMORANDUM

The following response is based on a review of the Lon House Memorandum:

- The House Report asserts that MPWMD is an expert at water supply and demand determinations “and has no reason to defer to the CPUC or any other agency[.]” (House Report, p. 1.) Based on Hazen and Sawyer’s peer review of MPWMD’s supply and demand analysis, it is clear that their evaluation of these issues neglected to consider the complete and current picture of how the supplies and demands work together, which is especially important when supply is inextricably linked to demand as is the case with wastewater. In this case, MPMWD did not make available or evaluate key information on wastewater flows and the impacts of those flows on the availability of water supplies to the community. In the case of supply, MPWMD selectively used outdated data that supported its narrative that there is plenty of supply for the Pure Water Expansion. In the case of demand, the MPWMD elected to use up to the minute demand information and actually updated its report between September 2019 and December 2019 to better support MPWMD’s narrative. In our judgement, an expert should not selectively choose a dataset to sway results to achieve an outcome.

- Page 2 of the House Report states: “Three more full years (2017-2019) of recorded water demand data is now available. This recent data makes the CPUC data set obsolete, reducing the existing customer 10-year average water demand available in the CPUC proceeding by 1,275 acre-feet per year (afy), a reduction of 10.7 percent.”
- The House Report overlooks the data that M1W presented to its Ad-Hoc JPA Revision Committee on July 20, 2020 that indicates since the beginning of 2020, wastewater treatment plant (WWTP) flows were reduced by 20.3.% since 2013 to 17,980 afy or 16.05 mgd.² If the CPUC data set is rendered “obsolete” because of new demand data, then so is the WWTP flow data in the SEIR and in the analysis by Stoldt that only relied on WWTP flow data from 2009 to 2013. 2013 to 2020 WWTP flow information demonstrates that WWTP flows are inadequate to supply the Expansion so that it could provide product water to meet the most restrictive demand projections by MPWMD (10,855 afy). Appendix A below and the Hazen memorandum from August 11, 2020 and August 23, 2020 show how the current wastewater flows translates directly to reduced capacity for supply.
- Page 3 of the House Report states: “The CPUC recognizes the importance of using the latest water demand data. In its decision in CalAm’s last General Rate Case, the CPUC concluded “‘Given the declining consumption pattern in the Monterey main district, the most recent data available is likely to be the most accurate.’ What could substitution of a couple more years of recent water demand information make? It turns out – a lot.”
 - Similar to the CPUC’s consideration of the last 3 years of data for demand, the same could be said for the WWTP Flows. ***What could substitution of a couple more years of recent wastewater flow information make? It turns out – a lot.***
 - The Expansion SEIR relied on WWTP flow data from 2009 to 2013. Hazen and CalAm commented that the WWTP flow data did not reflect actual WWTP flow available to M1W. In Hazen’s August 11 memo, Hazen identified publicly available data (including evidence of 2020 flows) indicating that WWTP flows have declined significantly since 2013. On August 20, 2020, M1W provided WWTP flow data from 2014 to 2019. So what difference does a few years make? “It turns out – a lot.” Since 2009 to 2013, WWTP flows have decreased from 21,764 afy to 17,980 afy, a reduction of 3,209 afy. Using M1W’s own updated numbers, it is evident that WWTP is not a sufficient or reliable source water for the Pure Water project or the Pure Water Expansion to produce its promised product water to CalAm’s customers of 3,500 afy and 2,250 afy, respectively.
- Pages 3, 4 and 5. The House Report confuses various characterizations of demand by calling CPUCs Planning Level Demand of 12,350 the “current” demand. It is not the current demand but is the planning level that is used to identify what level of demand to use based on the 2021 CDO date for starting the future projections of demand to use in planning for future water supplies. Planning level demand makes various additions

² Attached as Exhibit 5 to Hazen’s August 11, 2020 memorandum.

including tourism bounce back, Lots of Record, and Pebble Beach to the “current” demand to account for uncertainty in the demand when the pressures to suppress demand are lifted as supply constraints are mitigated.

- Similarly, House developed the table below as a comparison of Customer Existing Water Demand. None of the values in that table are Customer Existing Water Demand. These numbers are Planning Level Demand.
- In addition, it appears there is an error in the analysis between the 10-year average Demand and the 5-year average demand when compared to the 2020 Stoldt Memorandum at 10,863 and 9,825 afy, respectively. The Lon House Memorandum table below appears to use different values that are not explained in the memorandum for the same time period. With no transparency in how this was determined, these numbers form a speculative base to calculate future demand.

Table 1. Comparison of Estimates of CalAm Customer Existing Water Demand

CalAm Application	CPUC Adopted	10-year average (2010-2019)	5-year average (2015-2019)
13,290 afy	12,350 afy	10,619 afy	9,727 afy

- As noted above, House provides updated 10-year and 5-year average data that do not agree with the Stoldt updates from March 2020. House carries those numbers into the House Table 3 below estimating the Eventual Demand ranges.

Table 3. Comparison of Estimates of Eventual Monterey Peninsula Water Demand

	MPWSP Application	CPUC Adopted	10-yr Average Customer Demand plus MPWMD New Demands	5-yr Average Customer Demand plus MPWMD New Demands
Existing Customer Demand	13,290 afy	12,000 afy	10,619 afy	9,727 afy
New Water Demand	2,006 afy	2,000 afy	1,067-1,424 afy	1,067-1,424 afy
Total Eventual Demand	15,296 afy	14,000 afy	11,686-12,043 afy	10,794-11,151 afy

14 to 17% lower than CPUC adopted

20 to 23% lower than CPUC adopted

House again references Existing Customer Demand and adds New Water Demand and introduces the concept of Eventual Demand. Eventual Demand would appear to mean the demand to use in starting future planning and future demand projection efforts rather than relying on current water demand data that does not account for uncertainty. House

does not address uncertainty in the estimates of Existing Customer Demand that can be weighed down by measures such as the moratorium and the cost of purchasing allocations. Secondly, he does not address uncertainty in the estimates of the New Water Demands but continues to use the Range of Eventual Demands. Although the demand projections made by House appear to be uncertain and in error, the demand range presented by House is well within the range presented by MPWMD and others, which the Pure Water Expansion is unable to satisfy.

- House does not appear to analyze the water supply of 2,250 afy that can be produced from the PWM Expansion. The House memorandum does not evaluate available wastewater supply necessary to produce that 2,250 afy and therefore does not come to the conclusion that the PWM Expansion cannot meet “existing” and “eventual” demands. This is a mistake considering the updated wastewater flow information that calls further into question supply availability, reliability or sustainability. However, what is key is that House understands that another water supply is necessary and given the updated supply information would have only been able to state that the MPWSP is the only project that will add a new supply of water that is critical to meeting today's demands and future demands.
 - Due to lack of wastewater flows and other supplies, the PWM Expansion fails to meet even the lowest Eventual (future) demand projection of 10,855 from Stoldt and the 10,794 afy from House.
 - Refer to Updated Table 2 below from August 11, 2020 with the Flows updated with the latest WW Flows from M1W. The importance of the Updated Table 2 shown in the ERRATA below is that in Normal Years while building a reserve (Updated Table 9 column) there is only 652 afy available as feed to the PWM Expansion. ***The Pure Water Expansion will therefore only produce 528 afy.***
 - Refer to the Table 2, Updated Table 9 column, for actual water supplies available to meet current and future demands with the Pure Water Expansion. The demands above 9,772 afy cannot be met even with a speculative maximum ASR output of 1,300 afy.
- Page 7. House introduces a calculation for instantaneous and permanent water demand increase of 881 afy. The calculation is based on an increase from 2019 demand up to the 10 year average demand or a 9% change. We do not agree with this calculation which underestimates the demand that should be used for planning and does not account for uncertainty in demand.
- Page 9. House notes that MPMWD has clearly identified water supplies and demands. This is an incorrect statement. House does not look at where the water is originating similar to the errors made by MPWMD and the SEIR. Paper water without actual flow is not an adequate source.

III. ERRATA TO AUGUST 23, 2020 UPDATED TABLE 2

Table 2 in the Hazen and Sawyer August 11 and August 23, 2020 memorandums highlight the impact of the reduced wastewater flow on the actual supply flow balance and ultimately in the amount of flow to ASR.

In Hazen's August 11, 2020 memorandum, wastewater flows were based on the 17,987 afy calculated from the correlation with demand. In Hazen's August 23, 2020 memorandum, wastewater flows were revised based on the 18,555 afy average of the last 3 years of wastewater flows provided by M1W.

The Flow to PWME in the Table 8-11 Updates are adjusted to reduce flow to allow the Actual Use Flows to match with the available Supplies in the Updated Table 1 from the August 23, 2020 memorandum. The ASR Deficit calculated for the Table 8-11 Updates are calculated by subtracting the planned ASR value from the amount of ASR calculated in the Table 8-11 Update. In all cases, there is and will be a deficit to ASR based on the reduced wastewater flows. Updated TABLE 2 from Hazen's August 23, 2020 memoranda is replaced with the Updated TABLE 2 below to correct a tabulation error highlighted herein. This revision does not impact or modify Hazen and Sawyer's conclusion that due to reduced wastewater flows, there is only enough supply flows available to send 652 afy feed to the Pure Water Expansion to produce 528 afy in the normal years.

UPDATED TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

<i>Flow Balance in Acre-Ft</i>	Table 8	Table 9	Table 10	Table 11	Table 8 Update	Table 9 Update	Table 10 Update	Table 11 Update
<i>Flow to CSIP + CSIP Well Pumping</i>	17227	17227	17227	22619	17227	17227	17227	21091 ^e
<i>Flow to PWM^f</i>	4320	4320	4320	2963	4320	4320	4320	0
<i>Flow to PWM Drought</i>	248	248	0	0	248	248	0	0
<i>Flow to PWME^g</i>	2778	2778	2778	2778	2321 1753	652 84	889 321	0
<i>Flow to RUWAP</i>	741	741	741	741	741	741	741	741
<i>Actual Use Flows^h</i>	25314	25314	25066	29101	24857 24289	23188 22620	23177 22609	21832
<i>Flow to ASRⁱ</i>	5950	5950	5750	4650	5580 5120	4228 3768	4219 3759	0
<i>Concentrate Flow to Outfall^j</i>	1536	1536	1489	1232	1450	1133	1130	141
<i>Deficit To ASR</i>	0	0	0	-1100	-370	-1722	-1530	-4650

Notes:

- e CSIP and CSIP Well Flows from Table 8-11 Demand. Reduced CSIP in "Table 11 Updated" by taking Water Right
- f Revised flow to PWM down for Table 11 to match actual Use to supply
- g Flow available to PWME is calculated based on maintaining flow to PWM and RUWAP and to Concentrate
- h Actual Use is calculated to confirm balance with Supply
- i ASR Flow is from the AWT product water flow without RUWAP
- j Concentrate flow is 19% of Flow for PWM, PWM Drought, PWME, and RUWAP
- k Deficit to ASR based on Flow to ASR minus the PWM AND PWME DEMAND from Table 1

IV. REVIEW OF THE MCWD MEDIA STATEMENT ISSUED SEPTEMBER 9, 2020

The Marina Coast Water District issued a Media Statement on September 9, 2020 titled Contractual Agreements Guarantee Source Water To Monterey One Water For Pure Water Monterey Expansion. Hazen and Sawyer reviewed the Media Statement and provide the following comments:

- The Media Statement is continuing to mislead the community as to the volume of surface water and wastewater that are available as compared to “paper” water rights. Possession of certain water rights and agreements does not mean there is actually water available. This is similar to the Colorado River, where there are more water rights than available water. Recent wastewater flow information provided by Monterey One Water for years 2013 to 2020 prove that wastewater volumes available on an annual basis have dropped substantially compared to what was indicated and planned in the SEIR for the Pure Water Monterey Expansion.
- According to the SEIR, the newly identified sources proposed by MCWD for use by the Pure Water Expansion are not available to be used by that project. (SEIR Appendix M, pg. 9). Therefore, claiming the volume of water from these sources can be used does not demonstrate that these source are actually available and conflicts with the SEIR already circulated under CEQA.
- The Salinas Urban Runoff/Stormwater requires additional agreements as stated in the SEIR Appendix M, pg. 5. Therefore, the contractual agreements for this source are not in place and reliance on the availability of this source is speculative.
- The Reclamation Ditch and wastewater water volumes assumed available by MCWD and M1W in the SEIR have been shown to be much less than estimated. The Agricultural Wash Water flows and the Blanco Drain flows are both unverified and remain speculative. The agricultural waste water volumes have not been verified on an annual basis beyond 2013 and were only estimated according to the yield studies in the SEIR. The Blanco Drain flows beyond 2013 have not been provided and were estimated based on very limited data as stated in the Blanco Drain Yield Study, page. 7. Knowing that the Reclamation Ditch and wastewater flows have been shown to be much less than claimed in the SEIR, there is a need for verifiable data and values for these new sources identified by MCWD’s media statement.
- The EIR for the Pure Water Monterey project included modifications to the Salinas Valley Reclamation Plant (SVRP) to allow for more treated wastewater to be sent to Castroville Seawater Intrusion Project (CSIP) during winter months. Although, the proposed modifications to the SVRP have not been completed, it will further reduce the wastewater available to the Pure Water Monterey Expansion. Additionally, MCWRA intends to take wells offline in the CSIP area to reduce the increasing seawater intrusion.
 - In conclusion, MCWD by its own Media Statement is continuing to mislead the community that water is available for the PWM Expansion.

- The “New Sources” referenced are not to be used for the Pure Water Monterey Expansion accordingly to its own SEIR.
- The volume of wastewater available has been shown to be much less than planned.
- Finally, MCWRA is planning to expand CSIP and is reducing the number of wells in the area of seawater intrusion thus needing more of the treated wastewater effluent.
- Having adequate, reliable, sustainable water supplies for the Peninsula are critical to the community. When there are competing interests for limited supplies of water, it is critical to know that water supplies will actually be available and not just the paper volume stated in a water rights document or agreement.

Appendix A: Identified Available Water Supplies In Acre-Feet Per Year

Source / Assumption Scenario	Proposed by Others			ASR Controlled*			Wastewater & Reclamation Ditch Controlled*		
	CPUC	MPWMD 2020	MPWMD 2019	No ASR	Half ASR (650 AFY)	Full ASR (1,300 AFY)	Updated Table 9 – Normal Year building Reserve	Updated Table 10 – Normal Yr after full Reserve	Updated Table 11 – Dry Year
1. Carmel River	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376
2. Seaside Groundwater Basin	774	774	774	774	774	774	774	774	774
3. Aquifer Storage and Recovery	1,300	1,300	1,300	0	650	1,300	1,300	1,300	1,300
4. Sand City Desalination Facility	94	94	94	94	94	94	94	94	94
5. Pure Water Project	3,500	3,500	3,500	3,500	3,500	3,500	3,700	3,500	0
6. Pure Water Expansion	-	2,250	2,250	2,250	2,250	2,250	528	719	0
7. Other Available Supplies	-	300	406	-	-	-	-	-	-
Total without desalination Project	9,044	11,594	11,700	9,994	10,644	11,294	9,772	9,763	5,544
Surplus/Deficit assuming 10,855 afy demand	-1,811	739	845	-861	-211	439	-1083	-1,092	-5,311

* Figure 2 from the August 11, 2020 Hazen and Sawyer report depicts these alternative scenarios. (August 11, 2020 Hazen Memo, p. 19.)

EXHIBIT 4

Analysis of PWM Expansion Source Water Deficiencies in Response to Comments from Robert B. Holden

On September 11, 2020, Robert Holden, a former engineer for Monterey One Water (“M1W”), submitted a letter to the Coastal Commission alleging that the analysis in Appendix I and Appendix M of the Draft and Final SEIRs for the Pure Water Monterey Expansion Project (“PWM Expansion”) accurately showed that the PWM Expansion has sufficient source water to generate its required 2,250 afy. As Mr. Holden acknowledges, the source water calculations in Appendix I to the Draft SEIR were based on outdated flows from 2009 through 2013. (*See* Robert Holden letter to CCC, September 11, 2020, p. 2.) However, Mr. Holden claims that Appendix M to the FSEIR, which relied on flow data from 2018, was designed to show that “existing water rights could be used between the Base Pure Water Monterey Project, Marina Coast Water District’s (MCWD’s) Regional Urban Water Augmentation Project (RUWAP), and the [PWM Expansion]” in order to adequately supply each project. (*Ibid.*) To reach this conclusion, Mr. Holden’s letter includes a brief analysis indicating why each of the fourteen water sources identified in Appendix M are sufficient to meet the PWM Expansion’s needs. (*Id.* at 2-3.)

Mr. Holden’s analysis is incorrect and based on outdated flow information. The following table analyzes these same fourteen sources, highlighting (1) the flow estimates in Appendix M, (2) the actual projections based on analysis from Hazen & Sawyer and the most recent flow data, and (3) an explanation for these discrepancies. In particular, the following table reveals that Mr. Holden and Appendix M rely on inflated/outdated wastewater flows, misrepresent the amount of water that will be needed for the Phase 1 Pure Water Monterey Project (“Phase 1 PWM”) and the RUWAP, and ignore the fact that water rights under the Amended and Restated Water Recycling Agreement (“ARWRA”) between M1W and the Monterey County Water Resources Agency (“MCWRA”) are not actually available for the PWM Expansion. In fact, Mr. Holden fails to recognize that MCWRA has informed M1W that “the current [ARWRA] between MCWRA and M1W does not contemplate this expansion Project.” (April 27, 2020 MCWRA Letter to M1W re the Pure Water FSEIR, at 2.) Accordingly, the following table demonstrates that even under the most conservative estimates, the fourteen source waters analyzed in Mr. Holden’s letter and Appendix M can realistically only supply the PWM Expansion with 1,971 to 2,158 afy. This is well short of the 2,778 afy the PWM Expansion requires to generate its 2,250 afy.

#	Source Name	Final PWME SEIR (AFY)	Actual Projections (AFY)	Explanation
1	Secondary Effluent to Ocean Outfall	5,811	245 to 432	<p>The Coastal Commission Staff Report incorrectly states that 8,000 afy is available to the PWM Expansion from wastewater effluent directed to the ocean outfall. This figure was taken from the PWM Expansion Draft SEIR (Draft SEIR Appendix M, Table 2), however, the Final SEIR updated this assumption to 5,811 afy (Final SEIR Appendix M, Table 2).</p> <p>Even the figures used in the Final SEIR are overstated. When average annual wastewater flows to the M1W outfall for the most recent 3 years (18,555 afy) are considered, instead of the 18,810 afy used in the Final SEIR, the 5,811 afy of available wastewater discussed</p>

				<p>in the Final SEIR is further reduced to 5,732 acre-feet. (California-American Water Company (“Cal-Am”), <i>Unsecured and Insufficient Source Waters for the Pure Water Monterey Expansion Project</i>, November 5, 2020, Exhibit 3 (“September 10 Hazen Memo”), p. 2.) Further, when considering 2020 wastewater flow data (17,980 acre-feet), ocean outfall wastewater effluent is reduced yet again to 5,554 acre-feet). (<i>Ibid.</i>)</p> <p>Of this 5,732 or 5,554 acre-feet, Phase 1 PWM requires 4,320 acre-feet to produce 3,500 acre-feet of water for Cal-Am customers or 4,568 acre-feet to produce 3,700 acre-feet when building a drought reserve. (<i>Ibid.</i>) The RUWAP requires an additional 822 acre-feet or 741 acre-feet with backwash flows reintroduced. (<i>Ibid.</i>)</p> <p>Therefore the remaining amount of wastewater available to the PWM Expansion, less the wastewater needed for Phase 1 PWM and the RUWAP, is between 432 acre-feet (5,732 minus 4,568 minus 741) and 245 acre-feet (5,554 minus 4,568 minus 741). (<i>Ibid.</i>)</p>
2	Reclamation Ditch	808	0	<p>The Final SEIR assumes flows from the Reclamation Ditch will not be available for the PWM Expansion. (Final SEIR Appendix M, p. 9 [stating that Reclamation Ditch flows “are not assumed to be available for the Proposed Modifications, regardless whether the conditions precedent [in the ARWRA] are met”].) Therefore, it should not be considered a reliable source of water for the PWM Expansion.</p> <p>Additionally, the ARWRA between M1W and MCWRA, which sets forth the responsibilities for construction, operation, and financing of new source water for Phase 1 PWM, including Reclamation Ditch flows, is not yet effective. (Cal-Am letter to CCC, September 11, 2020, Attachment A: Applicant’s Staff Report and Findings (“Applicant’s Staff Report”), p. 106.) The ARWRA includes multiple outstanding conditions that are required to be completed before the ARWRA can become effective, although M1W and MCWRA amended the agreement in June 2019 to allow additional time to address the conditions while allowing M1W to use the new source waters for Phase 1 PWM until the conditions are met. However, the conditions to the ARWRA have yet to be satisfied and it is speculative to assume when the agreement will become effective. Moreover, MCWRA has informed M1W that “the current Amended and Restated Recycling Water Agreement (“ARWRA”) between MCWRA and M1W does not contemplate this expansion Project.” (April 27, 2020 MCWRA Letter to M1W re the Pure Water FSEIR, at 2; July 7, 2020</p>

				<p>MCWRA Letter to M1W re ARWRA, [“the ARWRA and subsequent two Amendments limit M1W’s utilization of the New Source Waters solely for use in the Pure Water Monterey Project Groundwater Replenishment Project approved on October 8, 2015. The ARWRA and Amendments do not contemplate M1W’s use of the New Source Waters in any other capacity, including any proposed expansion to the Pure Water Monterey Project.”].)</p> <p>Therefore, the reliability of certain ARWRA source waters for even the Phase 1 PWM, including Reclamation Ditch flows, are speculative due to the dispute concerning unmet conditions that must be satisfied before sources of water become fully secured. (<i>Id.</i>, pp. 106-107.)</p> <p>Moreover, even if the ARWRA conditions are satisfied, the water that M1W is entitled to is merely “paper” water, meaning these sources may not actually be available to M1W when they are needed most, such as during the summer or during drought.</p> <p>Finally, updated flow data from the U.S. Geological Survey (“USGS”), reveals that that Final SEIR significantly overestimated the availability of Reclamation Ditch flow by 16 percent in normal years to 67 percent in dry years. (Cal-Am, <i>Unsecured and Insufficient Source Waters for the Pure Water Monterey Expansion Project</i>, November 5, 2020, Exhibit 1 (“August 11 Hazen Memo”), pp. 10-11, Table 3.) In dry years, flow from the Reclamation Ditch, based on USGS recordings, is reduced to zero (or practicality zero) for five months out of a year. (<i>Id.</i>)</p>
3	Blanco Drain	2,620	0	<p>The Final SEIR assumes flows from the Blanco Drain will not be available for the PWM Expansion. (Final SEIR Appendix M, p. 9 [stating that Blanco Drain flows “are not assumed to be available for the Proposed Modifications, regardless whether the conditions precedent [in the ARWRA] are met”].) Therefore, it should not be considered a reliable source of water for the PWM Expansion.</p> <p>As discussed above, the ARWRA between M1W and MCWRA, which covers flows from the Blanco Drain, is not yet effective (Applicant’s Staff Report, p. 106), includes conditions that have not been satisfied (<i>id.</i>, pp. 106-107), and MCWRA does not believe that the agreement “contemplate[s] this expansion Project.” (April 27, 2020 MCWRA</p>

				<p>Letter to M1W re the Pure Water FSEIR, at 2). Therefore, Blanco Drain flows under the ARWRA cannot be relied upon.</p> <p>Blanco Drain flows under the ARWRA therefore are merely “paper” water and may not actually be available to M1W even if the above issues are resolved.</p> <p>Finally, post-2013 Blanco Drain flows have not been provided. Rather, the PWM Expansion SEIR provided estimates of Blanco Drain flows based on very limited data from the Blanco Drain Yield Study in the Draft EIR for the Phase 1 PWM. (September 11 Hazen Memo, p. 11.) Given that the Reclamation Ditch and wastewater flows have been shown to be much less than claimed in the Final SEIR, it is likely the Blanco Drain flows are similarly overstated. (<i>Ibid.</i>)</p>
4	Agricultural Wash Water	3,099	0	<p>The Final SEIR assumes Agricultural Wash Water (“AWW”) will not be available for the PWM Expansion. (Final SEIR Appendix M, p. 9 [stating that AWW flows “are not assumed to be available for the Proposed Modifications, regardless whether the conditions precedent [in the ARWRA] are met”].) The Final SEIR also states that “AWW is only available if conditions precedent are met and are assumed to not be available for the Proposed Modifications for the purpose of this analysis.” (<i>Id.</i>, Table 2.) Therefore, AWW should not be considered a reliable source of water for the PWM Expansion.</p> <p>As discussed above, MCWRA disputes that the ARWRA, which covers AWW, extends to the PWM Expansion. (April 27, 2020 MCWRA Letter to M1W re the Pure Water FSEIR, at 2.) Therefore, AWW is an unreliable source of water for the same reasons set forth above.</p> <p>Consistent with MCWRA’s understanding of the ARWRA, the City of Salinas also disputes M1W’s ability to use AWW for the PWM Expansion and asserts that the ARWRA only permits M1W to use AWW for Phase 1 PWM. Salinas explains that these water sources are not available for the PWM Expansion because “the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City’s agriculture industry, as determined by the City in its sole and absolute discretion.” (Cal-Am, <i>Unsecured and Insufficient Source Waters for the Pure Water Monterey Expansion Project</i>, November 5, 2020, Exhibit 6 (“April 27 City of</p>

				<p>Salinas Letter”), p. 2.) Therefore, AWW cannot be relied upon in determining the available source waters for the PWM Expansion.</p> <p>Thus, even if AWW was available for M1W it would be merely “paper” water and may not actually supply the PWM Expansion.</p>
5	Recycle Sump #1	41	41	<p>This source was not specifically analyzed by Hazen & Sawyer. Accordingly, despite the fact that M1W has not provided recent data to support the availability of this flow, this figure is conservatively assumed to be consistent with the figure in the Final SEIR. It is worth noting, however, that backwash flows are reduced proportionality with wastewater flows and that backwash flows from Recycle Sump #1 likely will be similarly reduced below the figures presented in the Final SEIR. We therefore reserve the right to update this figure as new information surfaces.</p> <p>In any case, even when conservatively assuming a 41 afy figure for Recycle Sump #1 flows, this table demonstrates that the cumulative source waters, including Recycle Sump #1, are insufficient to meet the PWM Expansion’s needs.</p>
6	Recycle Sump #2	104	104	<p>This source was not specifically analyzed by Hazen & Sawyer. Accordingly, despite the fact that M1W has not provided recent data to support the availability of this flow, this figure is conservatively assumed to be consistent with the figure in the Final SEIR. However, as discussed above, backwash flows are reduced proportionality with wastewater flows and backwash flows from Recycle Sump #2 likely will be similarly reduced below the figures presented in the Final SEIR. We therefore reserve the right to update this figure as new information surfaces.</p> <p>Once again, even when conservatively assuming a 104 afy figure for Recycle Sump #2 flows, this table demonstrates that the cumulative source waters, including Recycle Sump #2, are insufficient to meet the PWM Expansion’s needs.</p>
7	Approved PWM Project and MCWD AWPB Backwashes	290	290	<p>This source was not specifically analyzed by Hazen & Sawyer. Accordingly, despite the fact that M1W has not provided recent data to support the availability of this flow, this figure is conservatively assumed to be consistent with the figure in the Final SEIR. It is worth noting, however, that backwash flows are reduced proportionality with wastewater</p>

				<p>flows and that backwash flows from AWPB Backwashes will likely be similarly reduced below the figures presented in the Final SEIR. We therefore reserve the right to update this figure as new information surfaces.</p> <p>In any case, even when conservatively assuming a 290 afy figure for AWPB Backwashes, this table demonstrates that the cumulative source waters, including AWPB Backwashes, are insufficient to meet the PWM Expansion's needs.</p>
8	Proposed Modifications AWPB Backwashes (only available for Modifications)	152	36	<p>The Final SEIR indicates that this source would provide 152 afy. However, to achieve this number PWM Expansion must produce 2,250 afy from other water sources, and based on actual wastewater flow data that production level cannot be achieved. Specifically, based on updated wastewater flow data made available to the public for the first time by M1W in response to the August 11 Hazen Memo, in Normal Years while building a reserve, there is only 652 afy available as feed to the PWM Expansion, and the project will therefore only produce 528 afy. (September 10 Hazen Memo, p. 9.) Based on this reduced production level, only 36 afy of backwash would be available. (<i>Id.</i>, Table 1.)</p>
9	SVRP Backwash	515	492	<p>The Final SEIR indicates that this source would provide 515 afy. However, this calculation was based on assumed annual wastewater flows of 18,810 afy. When using the most recent 2020 data (17,980 afy), the actual supply from the SVRP Backwash would be 492 afy. (September 10 Hazen Memo, Table 1.)</p>
10	Boronda	95	95	<p>This source was not specifically analyzed by Hazen & Sawyer and is therefore conservatively assumed to be consistent with the figure in the Final SEIR. However, M1W has not provided recent data to support the availability of Boronda flows, and we therefore reserve the right to challenge this figure as new information surfaces.</p> <p>In any case, even when conservatively assuming a 95 afy figure for Boronda flows, this table demonstrates that the cumulative source waters, including Boronda flows, are insufficient to meet the PWM Expansion's needs.</p>
11	Farmworker Housing	18	18	<p>This source was not specifically analyzed by Hazen & Sawyer and is therefore conservatively assumed to be consistent with the figure in the Final SEIR. However, M1W has not provided recent data to support the availability of Farmworker Housing</p>

				<p>flows, and we therefore reserve the right to challenge this figure as new information surfaces.</p> <p>In any case, even when conservatively assuming an 18 afy figure for Farmworker Housing flows, this table demonstrates that the cumulative source waters, including Farmworker Housing flows, are insufficient to meet the PWM Expansion’s needs</p>
12	M1W’s ARWRA Summer Water (ARWRA Section IV 4.01 1(d))	650	650	<p>As discussed above, there is significant uncertainty over the ARWRA that makes reliance on this agreement for PWM Expansion source water untenable. As discussed above, the ARWRA is not yet effective, includes conditions that have not been satisfied, and MCWRA does not believe that the agreement “contemplate[s] this expansion Project.” (April 27, 2020 MCWRA Letter to M1W re the Pure Water FSEIR, at 2; July 7, 2020 MCWRA Letter to M1W re ARWRA, [“the ARWRA and subsequent two Amendments limit M1W’s utilization of the New Source Waters solely for use in the Pure Water Monterey Project Groundwater Replenishment Project approved on October 8, 2015. The ARWRA and Amendments do not contemplate M1W’s use of the New Source Waters in any other capacity, including any proposed expansion to the Pure Water Monterey Project.”].) Moreover, water under the ARWRA is merely “paper” water, meaning these sources may not actually be available to M1W when they are needed most, including during the summer or during drought.</p> <p>Finally, even when assuming that 650 afy of ARWRA Summer Water is available for the PWM Expansion, this table demonstrates that the cumulative source waters are insufficient to meet the PWM Expansion’s needs</p>
13	SRDF Screening	95	0	<p>The Final SEIR assumes flows from the SRDF Screening will not be available for the PWM Expansion. (Final SEIR Appendix M, p. 10 [“These analyses also exclude SRDF screening backwash flows for the same rationale as the Schaaf & Wheeler analysis. Specifically, when SRDF is operating, this indicates excess water is available for meeting all CSIP demands, and these flows are inconsistent year-to-year.”])</p> <p>The Final SEIR also states that these flows were “[i]gnored” because “these flows are inconsistent year-to-year.” (<i>Id.</i>, p. 7.) Mr. Holden’s letter states that “since this water is</p>

				not available each year, it was not used in the Appendix M calculation.” (Robert Holden letter to CCC, September 11, 2020, p. 3.)
14	Salinas IWTF Pond System	150	0	The Final SEIR assumes water from the Salinas IWTF Pond System will not be available for the PWM Expansion. (Final SEIR Appendix M, Table 2 [“IWTF Pond System waters are assumed to not be available”].) The Final SEIR indicated that the infrastructure necessary to divert flows stored in the Salina IWTF Pond System was under construction and that M1W did not have the ability to divert this water. (<i>Id.</i> , p. 5.) Mr. Holden’s letter to the Commission indicates that this infrastructure remains under construction. (Robert Holden letter to CCC, September 11, 2020, p. 3.)
TOTAL		11,104	1,971 to 2,158	The PWM Expansion requires 2,778 afy of source water to produce 2,250 afy of water. (September 10 Hazen Memo, p. 2.) Therefore, when the PWM Expansion’s source waters are realistically analyzed, it reveals a significant source water deficit (-807 to -620 afy) that will limit the project’s ability to serve any reasonable estimate of demand for Cal-Am’s customers.

EXHIBIT 5

MONTEREY COUNTY

WATER RESOURCES AGENCY

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BRENT BUCHE
GENERAL MANAGER



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September 11, 2020

Honorable Steve Padilla, Chair and Commissioners
California Coastal Commission
Attention: Tom Luster
455 Market Street, Suite 300
San Francisco, CA 94105

Via Electronic Mail: CalAmMonterey@coastal.ca.gov

Re: Monterey Peninsula Water Supply Project

Dear Commissioners,

The Monterey County Water Resources Agency (“MCWRA”) has a long-celebrated history utilizing recycled water. In collaboration with our sister agency, Monterey One Water (“M1W”), the Monterey County Water Recycling Projects (“MCWRP”) have delivered over 250,000 ac-ft of recycled water to the agricultural lands around the town of Castroville over the past two decades. The implementation of the MCWRP has allowed MCWRA to reduce groundwater pumping in the area and slow seawater intrusion. However, seawater intrusion continues to progress and Castroville’s municipal water supply is one of the most impacted. Without a reliable municipal supply, residents, businesses, and industries in the coastal communities of the northern Salinas Valley cannot thrive. The Monterey Peninsula Water Supply Project addresses the water supply needs of the Monterey Peninsula with the additional benefit of providing a long-term sustainable water supply for the severely disadvantaged community of Castroville. For the reasons discussed below, MCWRA reiterates its support for Cal-Am’s Monterey Peninsula Water Supply Project.

The Monterey Peninsula Water Supply Project’s Compliance with the Agency Act

In 2016, several parties (MCWRA, Cal-Am, Coalition of Peninsula Businesses, Landwatch Monterey County, Monterey County Farm Bureau, the Monterey Peninsula Regional Water Authority, Monterey Peninsula Water Management District, M1W, Planning and Conservation League Foundation, and the Salinas Valley Water Coalition) entered into a Return Water Settlement Agreement (“RSWA”), which addresses a concern raised early on about the location of the slant wells for the desalination plant, which overlay the western portion of the Salinas Valley Groundwater Basin (“SVGB”). Specifically, the issue was whether the production source water for the Monterey Peninsula Water Supply Project would conflict with the anti-export provision of the Monterey County Water Resources Agency Act (“Agency Act”) and infringe upon the groundwater rights of those in the SVGB. Specifically, Section 52-21 of the Agency Act states that no SVGB groundwater may be exported for any use outside the SVGB.

The Water Resources Agency manages, protects, stores and conserves water resources in Monterey County for beneficial and environmental use, while minimizing damage from flooding to create a safe and sustainable water supply for present and future generations.

In order to meet the requirements of the Agency Act, Cal-Am committed, through the RWSA, to make available for delivery “Return Water” equal to the percent of SVGB groundwater, as distinguished from seawater in the source water. The MCWRA Board of Supervisors approved the RWSA, thereby finding that the Monterey Peninsula Water Supply Project does not violate the Agency Act. MCWRA is entitled deference in its interpretation of the Agency Act. The California Public Utilities Commission agreed with MCWRA and approved the RWSA, finding it was reasonable, consistent with the law (including the Agency Act), in the public interest, and fully supported by the record. Coastal Commission staff failed to recognize the benefits of the RWSA solution, and MCWRA urges the Coastal Commission to consider the past findings that the Monterey Peninsula Water Supply Project is compliant with the Agency Act.

Pure Water Monterey Project and Expansion Project

When the MCWRP were designed over twenty years ago, it was assumed that the amount of wastewater flowing into the treatment plant would increase over time and provide additional recycled water for use in the region. This assumed increase in flows has not materialized and in fact has declined, mainly due to water conservation measures being implemented by residents, businesses, and the agricultural industry. The overall trend is for the use of water conservation measures to increase in the future, which will most likely further diminish inflows.

For the past five plus years, MCWRA has worked collaboratively with M1W on the establishment of new source waters for both the Castroville Seawater Intrusion Project growers and the Pure Water Monterey Project. However, MCWRA did not support certification of the Final Supplemental Environmental Impact Report (“FSEIR”) on expansion to the Pure Water Monterey Project. The Expansion Project’s new source waters have not been quantified sufficiently for MCWRA to agree that there is an adequate amount of treated wastewater to meet current contractual obligations, as well as additional demand. Furthermore, there are too many unanswered questions regarding the availability and rights to source waters, future operations, and the resulting adverse impacts for MCWRA and its stakeholders. The M1W Board of Directors recognized these constraints and chose to not certify the FSEIR. MCWRA strongly believes that the now tabled Expansion Project will not serve as a sustainable water supply for the Monterey Peninsula.

MCWRA is committed to assist in securing a long-term sustainable water supply for the Monterey Peninsula and Salinas Valley communities. In that regard it is the MCWRA’s conclusion that currently the Monterey Peninsula Water Supply Project is the only project that addresses that interest. MCWRA urges the Coastal Commission to issue the Coastal Development Permit for the Monterey Peninsula Water Supply Project.

Sincerely,



Brent Buche
General Manager

cc: Paul Sciuto, General Manager - Monterey One Water
Eric Tynan, General Manager - Castroville Community Services District
Dave Stoldt, General Manager – Monterey Peninsula Water Management District
Keith Van der Matten, General Manager – Marina Coast Water District

EXHIBIT 6



City of Salinas

OFFICE OF THE MAYOR • 200 Lincoln Avenue • Salinas, California 93901 • (831) 758-7201 • Fax (831) 758-7368

April 27, 2020

Via Email - purewatermontereyinfo@my1water.org

Chair Ron Stefani

Monterey One Water Board of Directors

5 Harris Court, Building D

Monterey, CA 93940

Re: **Use of Agriculture Produce Wash Water for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, Final Supplemental Environmental Impact Report (Final SEIR)**

Dear Chair Stefani and Members of the Board:

The City of Salinas continues to have significant concerns regarding the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (Expansion Project), and believes that the Final Supplemental Environmental Impact Report (SEIR) is inadequate. In particular, the Final SEIR fails to meaningfully address the City's concerns regarding the use of Agricultural Wash Water as detailed in the City's January 29, 2020 comment letter on the Draft SEIR (Salinas Comment Letter). Instead of addressing the City's legitimate concerns, the Final SEIR includes an entirely new source water analysis that has never been publicly vetted, and continues to claim that water sources that belong to the City and Salinas Valley farmers, businesses and residents will be available for the Expansion Project. These issues alone render the Final SEIR inadequate, and it cannot be certified.

The Salinas Comment Letter on the Draft SEIR specifically expressed concerns that (1) "M1W does not have sufficient agreements in place with the City to permit M1W to use the City's agriculture produce wash water for the Expansion Project," and (2) the Amended and Restated Water Recycling Agreement ("ARWRA") "does not contemplate the use of agricultural produce wash water for the Expansion Project." Neither of these concerns have been addressed adequately in the Final SEIR.

Regarding the use of Agricultural Wash Water, the City has explained that the 2015 Conveyance and Treatment Agreement allows Agricultural Wash Water to be used **only for the previously approved** Pure Water Monterey Replenishment Project, and **not for the proposed** Expansion Project. (See Agreement, § 1.a-b, Recital B.) The Final SEIR does not respond to this simple contractual issue. While M1W and the



City have worked together cooperatively in the past to manage wastewater systems in the City (Comment F, p. 4-89), the fact remains that there is no agreement between M1W and the City for use of the Agricultural Wash Water.

In the absence of an agreement, the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City's agriculture industry, as determined by the City in its sole and absolute discretion. M1W notes that it is "unaware of another treatment plant besides its own that could enable use of the Agricultural Wash Water for another purpose" (Comment F, p. 4-89). However, M1W is not entitled to the City's Agricultural Wash Water simply because the City has not yet formalized its future plans. The City has every right to use its water as it chooses.

Regarding the ARWRA, the Salinas Comment Letter separately explained that it does not contemplate the use of agriculture produce wash water for the Expansion Project. The ARWRA was "approved based on the EIR as certified" in 2015—long before the Expansion Project was proposed. (ARWRA, pp. 6-7 [Recitals].) The 2019 Amendment did not alter the ARWRA to cover use of Agricultural Wash Water for the Expansion Project.

The Final SEIR merely states that it disagrees with the Salinas Comment Letter, but does not explain why. (See Comment F, p. 4-89.) Instead, the Final SEIR points to Appendix M, an entirely new assessment of source water that was not provided for public review and claims to show for the first time that M1W has sufficient source waters for the Expansion Project without the Agricultural Wash Water. Yet despite the new Appendix M analysis, the Draft SEIR has not been revised to remove Agricultural Wash Water as an intended source for the Expansion Project and continues to rely on it. This continued reliance on Agricultural Wash Water completely ignores the concerns that the City clearly and unequivocally raised on the Draft SEIR.

For the record, the City is now reasserting its position in very plain terms: **M1W does not have any approval or authorization from the City of Salinas to use the City's Agricultural Wash Water for the Expansion Project.** The City has stated its concerns on these issues in its Draft SEIR comments, and to date they have been ignored. Without adequate water rights, and a fulsome analysis of available source waters, **the Expansion Project is not feasible and the Final SEIR should not be certified.**

Unfortunately, the Final SEIR is continuing to place M1W's needs and goals in opposition to those of the Salinas Valley agricultural community – without even attempting to reconcile them through responses to the City's Draft SEIR comments. The City also remains concerned that the Expansion Project is proposing to reduce the water supply for agricultural water deliveries as compared to the previously approved Groundwater Replenishment Project, which means that more water will be taken from the



City of Salinas

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Salinas Valley Groundwater Basin without providing a benefit to the Basin. The Final SEIR openly acknowledges that under the new Appendix M analysis, the Expansion Project will further reduce the water available to CSIP by up to 800 AFY and take supplies needed to balance the basin. (Final SEIR, p.3-20 [“In sum, the Proposed Modifications would reduce the future beneficial increase in recycled water that would be available for the CSIP.”].) This is a substantial reduction to one of the important benefits that the Groundwater Replenishment Project provided and puts the Peninsula’s water needs at further odds with those of the Salinas Valley.

If M1W continues to pursue development of a project that relies on the City’s water without its approval, and that reduces benefits to the Salinas Valley Groundwater Basin and undermines efforts to halt saltwater intrusion in the Basin, the City will recommend that the Monterey County Water Resources agency exercise its rights to terminate the ARWRA. The Water Resources Agency secured the water rights under the ARWRA for the purpose of benefiting the Salinas Valley Groundwater Basin, and not as an excuse for the Monterey Peninsula to avoid obtaining its own water supply solution. The ARWRA is not a permanent transfer of water rights to M1W, and in the end, those water rights belong to the Water Resources Agency and not to M1W. If M1W staff believes that it can sacrifice the Salinas Valley Groundwater Basin in order to achieve other political goals on the Monterey Peninsula, it’s time for the Water Resources Agency and water users in the Salinas Valley to go their own way.

The City takes all of these issues very seriously and firmly believes that the Final SEIR before you is inadequate and that the Expansion Project cannot proceed. We appreciate the opportunity to comment and respond to the Final SEIR. Should you have questions or wish clarification on the important issues the City has raised, please contact me at (831) 758-7201.

Regards,

Joe Gunter

Mayor

City of Salinas

cc: *[Monterey County Water Resources Agency]*

EXHIBIT 7



**ACTION
MINUTES**

**Regular Meeting
Monterey One Water
Board of Directors**

April 27, 2020

**THIS MEETING WAS HELD ELECTRONICALLY AND REMOTELY ONLY VIA ZOOM VIDEO
CONFERENCING AND TELECONFERENCING.**

The meeting was compliant with Governor Newsom's Executive Order N-29-20 which allows local legislative bodies to hold public meetings via teleconference and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and address the local legislative body to avoid public gatherings, and which has suspended all contrary provisions of the Brown Act.

Zoom Webinar Meeting link: <https://zoom.us/j/535202951?pwd=NEJBUWxaeCtCcSs4TFdydFJXMzdKdz09>

Via Phone at (669) 900-9128

Webinar ID: 535 202 951 Password: 761036

1. CALL TO ORDER

The Regular Meeting of the Board of Directors of the Monterey One Water was called to Order by Chair Stefani at 5:03 p.m., on Monday, April 27, 2020 via Zoom video conferencing and teleconferencing.

2. ROLL CALL

BOARD MEMBERS PRESENT :

Ron Stefani, Chair
Mary Ann Carbone, Vice Chair
Linda Grier
John Phillips
John Gaglioti
Thomas P. Moore
Tyler Williamson
Nick Smith
Gloria De La Rosa
Jason Campbell

Castroville Community Services District
Sand City
Boronda County Sanitation District
County of Monterey
Del Rey Oaks
Marina Coast Water District
Monterey
Pacific Grove
Salinas
Seaside

M1W STAFF PRESENT:

Paul A. Sciuto
Tamsen McNarie
Fred Marsh
Dave Lindow

General Manager
Assistant General Manager
Business Services Manager/CFO
PWM Program Manager

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M1W Regular Board Meeting
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Chayito Ibarra

Yohana Vargas
Rob Wellington
Russell Hammersmith
Rachel Gaudoin
Alison Imamura
Mike McCullough
Bob Holden
Jennifer Gonzalez
Jonathan Mungcal
Leara Sampson
Jose Guzman
Sarah Stevens
Patrice Parsons
Jerry Valladao
Alma Garcia
Bret Boatman
James Coleman
Steph Anastasia
David Bradley
Nathan Clark
Darrele Harris

Executive Assistant to the GM/Secretary to the Board
Contracts Administrator
Legal Counsel
IT Technician II
Public Outreach Coordinator
Associate Engineer
Director of External Affairs
Principal Engineer
Engineering Manager
Utilities & Maintenance Services Manager
Director of Employee Services
Chief Plant Operator
Administrative Analyst
Lab Supervisor
Associate Engineer
Administrative Support Specialist II
Field Maintenance Supervisor
Safety Officer
Lab Analyst II
Operator III
Operations Supervisor
Utilities Supervisor

OTHERS PRESENT:

Barbara Schussman, Perkins Coie
Ed Lin, Todd Groundwater
Tony Lombardo, Anthony Lombardo and Associates
Eric Tynan, Castroville Community Services District
Bill Cronin
Susan Schiavone
George T. Riley
Kathryn Horning, Cal Am
Ian Crooks, Cal Am
Tim O'Halloran, Cal Am
Trevor Shapiro
Gary Kreeger
Catherine Stedman, Cal Am
Kenneth Rutherford
Christopher Cook
Marc Kelley
Anna Thompson
Phyllis Meurer
Melodie Chrislock, Public Water Now
Dave Chardavoyne, DCA Consulting
Tamara Voss

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Sylvia Shih
Larry Bacon
Chip Wilkins
Eric Zigas
Kenneth R. Pelletier, PhD, MD
Tammy Jennings
Alana Myles
Carol Setinek
Walt Notley
Thomas Horvath
Dana Cleary
Susan Ragsdale-Cronin
Lisa Haas
Brian Frus, City of Salinas
Kathy Biala
Robert J. McKenzie Jr.
Joe Hognander
Michael Hanley
Winston Stromberg
Jon Lear
Troy Ishikawa
Ruth Stoner Muzzin
Tom Rivelli
Kimberly Shirley
Kevin Tilden
Jonas Minton
Rudy Fischer
Suresh Prasad, MPWMD
Therese Kollerer
Shaunna Murray
Kelly Donlon
Arleen Hardenstein
Matthew R. Rankin
Katalin Markus
Michael DeLapa
Steve Westhoff
Karen Harris
Donald Monette
Hans Ongchua
Guido Schreiber
Phil Wellman
Brent Buche, MCWRA
Inge Lorentzen
Mike Kennedy
Brian McCarthy
Saoirse Folsom

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Catherine Crockett
Joan Wellington
Libby Downey
Rick Heuer
Gary Hoffmann
Rick Aldinger
Royal Calkins
Peter Munteer
Kent Hodgkinson
Marcia Wright
Mary Solseng
Lucas Quass
Craig Spencer
Jan Shriner
Jim Johnson
Kill Kampe
Larisa Meisenheimer
Lisa Talley Dean
Luke Coletti
Deidre Sullivan
Jeff Davi
Joel Wright
John Tilley
John Kitayama
Molly Evans
Douglas Deitch
Jeanne Herrick
Roger Powers
Bob Colloton
Keith Van Der Maaten
Lisa Hong
Dave Stoldt, MPWMD
Carol Chorbajian
Audra Walton
Matt Johnson
Lee Wolfer
Bob Smith
Anthony Cerasuolo
Jane Haines
Frederica Jones
Marli Melton
Alica Anna Ackermann
Gail Beyatte
Michael Fitzsimmons
Tom Luster
Pat McNeill

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Norm Groot, Monterey County Farm Bureau
Mary Jane Dziedzic
Sheri Damon
Nancy Runyon
Matthew Zefferman
Myrleen Fisher
Wayne Marien
Pauline Sobel
Erin Reddy
Karl Pallastrini
Trulee Ricketts
Margaret Thum
Charles Keller
Donald Monette, Cal Am
Elsa Weber
Mandy Sackett
Patrick Brown
Vivienne Riggio
Paul Bruno

3. PLEDGE OF ALLEGIANCE

Chair Stefani led the pledge of allegiance.

4. PUBLIC COMMENTS

Chair Stefani called for Public Comments.

Tammy Jennings stated she had no public comments at this time and wanted to ensure she could speak at a later time.

Secretary to the Board Ibarra read a public comment submitted by Douglas Deitch which expressed his concern for possible Corona Virus contamination in wastewater and groundwater.

After hearing no further comments, Chair Stefani closed the public comment period.

5. CONSENT AGENDA

Chair Stefani stated that the Board would now consider approval of Item 5, consent agenda and asked for any questions from the Board and public.

Chair Stefani called for Public Comments. After hearing no further comments, Chair Stefani closed the public comment period.

ACTION TAKEN: It was moved by Member Smith, seconded by Member Gaglioti, to approve Consent Agenda Items 5-A through 5-I, and carried by the following roll call vote:

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Ayes: Stefani, Grier, Phillips, Gaglioti, Moore, Williamson, Smith, De La Rosa, Campbell

Noes: None

Absent: Carbone

- A. Consider Approval of Board Minutes for Regular Board Meeting of March 30, 2020
- B. Receive Interim Schedule of Cash and Investments
- C. Receive Check Register for March 2020
- D. Receive WDR and NPDES Reports; Plant and Community Influent Flows; and Effluent Water Quality for March 2020
- E. Receive Budget Amendments and Reserve Update
- F. Receive Interim CIP Financial Report
- G. Consider Approval of a Contract Amendment with Covello, A Psomas Company, for Construction Management Services for the Blanco Drain and Reclamation Ditch Diversion Facilities Project for a Not-to-Exceed Amount of \$50,955
- H. Consider Approval of a Contract Amendment with E2 Consulting Engineers for Engineering Services During Construction (ESDC) for the Blanco Drain and Reclamation Ditch Diversion Facilities Project for a Not-to-Exceed Amount of \$21,570
- I. Consider Approval of Resolution No. 2020-06, a Resolution Ratifying and Approving Final Credit Agreement with Bank of America for Borrowing of Funds In The Aggregate Principal Amount of Not To Exceed \$15,000,000 To Provide Bridge Financing For Capital Improvement Projects of The Agency and Startup Costs for Pure Water Monterey Project

6. COMMITTEE REPORTS

- A. BUDGET/PERSONNEL COMMITTEE (BPC) – APRIL 9, 2020 (CANCELLED)
- B. RECYCLED WATER COMMITTEE (RWC) – APRIL 16, 2020
 - 1. Receive RWC Draft Minutes of April 16, 2020

ACTION TAKEN: It was moved by Member Gaglioti, seconded by Member Phillips, to receive the RWC Draft Minutes of April 16, 2020, and carried by the following roll call vote:

Ayes: Stefani, Grier, Phillips, Gaglioti, Moore, Williamson, Smith, De La Rosa, Campbell

Noes: None

Absent: Carbone

7. ACTION ITEMS

A. Consider Marina Coast Water District's Request to Increase Its M1W Weighted Votes from Two to Three Votes in Accordance with Section 3.04, Voting, of the M1W Joint Exercise of Powers Agreement

General Manager Sciuto introduced this item and stated that it had been brought to the Board's attention over the past four months that MCWD had made some inquiries requesting the review of their current population figures and weighted votes. Mr. Sciuto referenced the letter that was received by Member Moore with documentation from the California Department of Finance for the basis for increasing MCWD's weighted votes from two to three.

Member De La Rosa suggested tabling this item until the 2020 Census has been completed.

Member Phillips stated that he thinks Castroville Community Services District is entitled to two weighted votes since it merged with Moss Landing Community Services District.

Member Williamson stated that a deeper conversation needs to be had in order to understand the facts that are before them with regard to the number of weighted votes MCWD is entitled to.

Member Moore stated that MCWD has been entitled to three weighted votes since last July due to a population increase that occurred then on completing an annexation, but it has taken some time to get information from the California Department of Finance. Member Moore went over the information from the California Department of Finance with the Board, and explained why MCWD was entitled to three weighted votes.

Chair Stefani stated that he tried bringing to the Board the consideration of increasing Castroville Community Services District's weighted votes after it absorbed Moss Landing Community Services District into their service area but was told that it would require an amendment to the JPA.

Member Campbell stated that it is clear that based on the language in the JPA and documentation provided by Member Moore that MCWD is entitled to three weighted votes, the question is whether the Board will recognize this.

Member Williamson stated that he is hearing that other Board members want to increase their weighted votes, but they need to go through the same process to update their population figures and should separately consider MCWD's request to increase theirs.

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Member Gaglioti stated that the information provided by MCWD needs to be verified independently before it can be considered.

Chair Stefani called for Public Comments.

Secretary to the Board Ibarra stated that five public comment letters were received for this item which were provided to the Board and included in the board agenda packet from the following:

Eric Tynan, Castroville Community Services District General Manager

Layne Long, City of Marina City Manager

Therese Kollerer, Citizens for Just Water

Joe Gunter, City of Salinas Mayor

The following people spoke in opposition to increasing Marina Coast Water District's weighted votes:

Rick Aldinger

Eric Tynan

Norm Groot

Paul Bruno

The following people spoke in support of increasing Marina Coast Water District's weighted votes:

Brian McCarthy

Margaret Ann Coppernoll

Susan Schiavone

Matt Zefferman

Libby Downey

Melodie Chrislock

Rudy Fischer asked if Seaside's weighted votes would be reduced since Marina Coast Water District annexed part of their service area which reduced their population.

Unknown male spoke against and the timing of this item.

Bill Kampe commented on this item.

After hearing no further comments, Chair Stefani closed the public comment period.

ACTION TAKEN: It was moved by Member Moore, seconded by Member Williamson, to Approve Marina Coast Water District's Request to Increase Its M1W Weighted Votes from Two to Three Votes in Accordance with Section 3.04, Voting, of the M1W Joint Exercise of Powers Agreement, which motion failed by the following roll call weighted vote:

Ayes: Moore (2), Williamson (3), Campbell (3)

Noes: Grier (1), Stefani (1), Phillips (1), Gaglioti (1), Smith (2), De La Rosa (6), Carbone (1)

Absent: None

B. Consider Rejecting All Bids for the Construction Contract for CP324 Fire Suppression Tank Modifications Project

Associate Engineer Valladao presented this item and stated that four bids were received for the Construction Contract for CP324 Fire Suppression Tank Modifications project. Mr. Valladao noted that due to increased delinquencies due to COVID-19, there may not be sufficient funds available in the budget through fiscal year 20/21 to fund this project. He stated that because of this, staff recommends rejecting all bids at this time, and continue renting a temporary water storage tank at a cost of approximately \$192 per week until sufficient money is available to rebid this project.

ACTION TAKEN: It was moved by Member Smith seconded by Member Gaglioti to Reject All Bids for the Construction Contract for CP324 Fire Suppression Tank Modifications Project, which motion carried by the following roll call vote:

Ayes: Stefani, Carbone, Phillips, Gaglioti, Moore, Williamson, Smith, De La Rosa, Campbell, Grier

Noes: None

Absent: None

C. Certification of the Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Project (Backup Expansion) and Conditional Project Approval (This Item will not be considered by the Board of Directors until 6 PM or later)

General Manager Sciuto introduced this item and provided background on the actions this Board has taken to date to get to this point. Mr. Sciuto noted that the Board has before them two Resolutions, one to certify the final SEIR and one to conditionally approve the project. Mr. Sciuto introduced Associate

Engineer Imamura and CEQA Counsel Barbara Schussman who would provide more information on the Final SEIR.

Associate Engineer Imamura provided the board with an overview of the responses to the public comment letters that were submitted in response to the final SEIR.

CEQA Counsel Barbara Schussman stated that a couple of the issues raised in the comment letters received pertained to water supply and whether there would be enough and if the project would be able to accommodate the long demand. Ms. Schussman stated that while both of these issues are important to the Board, resolution of this issue was not particularly relevant to the environmental impact of the project under CEQA. With regard to whether there will be enough water, she stated that the SEIR determined that there would be and does this so the maximum capacity is evaluated in the SEIR. With regard to the question of what if there is not enough source water, Ms. Schussman noted that if that happens, the environmental impacts of the project then would be less, such as less greenhouse emissions.

Member Phillips noted that the City of Salinas and MCWRA still have concerns about source waters. General Manager Sciuto stated that staff continues to have open dialogue and recently met over teleconference with Mayor Gunter and City Manager Corpuz and there are misunderstandings or difference in opinion on the subject.

Chair Stefani called for Public Comments.

Secretary to the Board Ibarra announced that roughly 177 public comment letters on this item were received which were provided to the Board and included in the board agenda packet from the following:

Margaret-Anne Coppernoll, PhD.
Jonas Minton, Planning & Conservation League
Robert Coble and Patricia Kelly Coble
Beverly G. Bean
Kenneth R. Pelletier, PhD, MD
Michael Baer
Teresa Wagner
Walt Notley
Bill Donovan
Amy Anderson
Clyde Roberson, Mayor of Monterey
Marli Melton
Nancy Runyon
Susan L. Schiavone

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Alexander T. Henson
Anna Thompson
Gary Kreeger
Jane Haines
Jay Bartow
John Adair
Karen and Marty Wiskoff
Katalin Markus
Kimberly Shirley
Jonas Minton, Planning & Conservation League
Rebecca Barrymore
Robert Evans
Roland Martin
Sharon Dwight
Tamara Harris
Vicki Pearse
Charles Cech
Elizabeth Weber
Forrest Gunnison
Frederica Jones
George Riley
Jose Rafael Ramos
Juli Hofmann
Kenneth Rutherford
Kevin Raskoff
Mary M. Solseng
Melodie Chrislock
Phil Wellman
V. W. Thompson
Vicki Williams
Bob Jacques
Mary M. Solseng
Mark Stone, Assemblymember 29th District
Barbara Moore
Carol J. Jones
Harvey E. Billig III M.D.
Ian N. Oglesby, Mayor City of Seaside
Lisa Haas
Marlene Cresci Cohen, Ph.D.
MPWMD Board of Directors
Renee Franken
Roberty Myers

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Roger J. Dolan
Ron Weitzman, Water Ratepayers Association of Monterey Peninsula
William W. Monning, Senator 17th District
Tammy Jennings
Norm Groot, Monterey County Farm Bureau
Dan Albro
Jan Shriner
Forrest Melton
Gary D. Hoffmann, P.E.
J. Eric Tynan
Alice Angell Green
Kristin Molle, Cory & Kaia
Layne Long, City Manager of Marina
Mart Molle
Mary Molle, RN PhD
Ina Brisley
Rodger Langland
Therese Kollerer
Mary Jane Dziedzic
Tammy L. Jennings
Alison Kerr, Mayor of City of Del Rey Oaks
Andrew and Elena Allison
Bob Smith
Bonnie Whisler
Branham Rendlen
Carol O'Neil
Carol Setinek
Charles Mendez
Chris Mack
Christine McEnery
Elizabeth Honeyman
J. Burns
James Emery
Karen Hewitt
Kayhan Ghodsi
Kristina Baer
Lauren Virshup
Leslie Asher
Margaret Davis
Mark Watson
Matt Zefferman
Melissa Hutchinson

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Nina Munoz
Paul Whitson
Randa Jacobs
Rebecca Barrymore
Richard Andrews
Richard Jordan
Shelby Fredrick
Tim Sanders and Jane Sanders
Timothy Smith
Tom Rivelli
Troy Ishikawa
Karin Forney
Duncan Joseph Moore
Glen Grossman
Anne Canright
Karen R. Harris
Rev. Alice Ann Glenn
Cate Mulligan
Dale D. Huss
Ida Nishimura
Jeana Jett
Sylvia Shih
Tom Ward
Victoria Beach
Susan Morley, MA, RPA
Peter Le
Jeanne Turner
Sheila Sheppard
Elisabeth M. Billingsley
Dan Turner
Martin Eck
Claudia Eck
Mark Anicetti
Anna Brigantino
Natalie Anicetti
Andrew Passell
Wayne Marien and Elizabeth Stacey
Teena Wildman
Steve McShane
Gaely Jablonski
Gerry Orton
Greg Simmons

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James Yuen
Jay Roland
Kerry Smith and Jamie Dagdigian
Leigh Fitz
Liesbeth Visscher
Mark K.R. Simmons
Martin Wrixton
Michael Morris
Nina Solomita
Peter Adler, PhD
Robert and Denyse Frischmuth
Tina Walsh
Walton Son
Michael Owen
Sanat Regmi
Douglas Mackenzie
Grace Silva-Santella
Charles Cech
Marlene Tise
Patricia A. Mahoney
Dana Cleary
Laura Blanton
Bill Blanton
Doane Hoag
Joe Gunter, Mayor City of Salinas
Karen Anderson
Larry Parrish
Mark Eckles
Mary Kramer
Brook Ewoldsen
Michael DeLapa
Alice Angell Green
William A. Boosman
Audra M. Walton
Catherine Crockett
Douglas Deitch

The following people spoke in support of certifying the final Supplemental Environmental Impact Report:

Jonas Minton
Rick K.
Rudy Fischer

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Molly Evans, MPWMD Chair
David Stoldt, MPWMD General Manager
Anthony T.
Libby Downey
Marli Melton requested that Chair Stefani recuse himself due to serving on both the Monterey One Water and Salinas Valley Basin Groundwater Sustainability Agency Board of Directors.
Chip Wilkins
Tammy Jennings
Susan Schiavone
Brian McCarthy
Saoirse Folson
Melodie Chrislock
Matt Zefferman

The following people spoke in opposition to certifying the final Supplemental Environmental Impact Report:

Peter Mounteer
Rick A.
Phyllis Meurer
Carol Chorbajian
Rene B.
Tom Rowley
Brent Buche, MCWRA General Manager
Bill Kampe
Gary Hoffman, MPWMD Director, clarified he did not vote in favor of sending a letter of support to certify the Final SEIR on behalf of the MPWMD Board.
Eric Tynan, Castroville Community Services District General Manager
Paul Bruno
Sheri Damon
Jeff Davi
Marc Kelley
John Tilley
Margaret Thum
Anthony Lombardo
Joel Wright
Marcia
Jim

After hearing no further comments, Chair Stefani closed the public comment period.

After public comment, Board members took turns providing their reasons for supporting or not supporting certifying the Final SEIR.

Legal Counsel Wellington addressed the letter received from a member of the

public where they request that Chair Ron Stefani recuse himself from voting on this item due to an alleged conflict of interest stemming from Government Code Section 1099 because he serves on the Board of Directors of both the Monterey One Water and the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA).

Chair Ron Stefani responded that Government Code Section 1099 relates to elected offices and he is appointed to both M1W and the SVBGSA and not elected.

Mr. Wellington noted that Government Code Section 1099 relates to not simultaneously holding two public offices that are incompatible. He stated that he did not have time to study this issue since he did not see the letter until after 3:00 pm today. Because of this, he noted three options for Chair Stefani to take in response to this letter as follows 1) The Board can continue this matter to allow adequate time for Chair Stefani to obtain advice 2) Chair Stefani can decide to step down 3) Chair Stefani can consider not stepping down and voting on this item.

Chair Stefani stated that he believes he does not have a conflict of interest because when he first joined the SVBGSA he inquired about this and he was advised that there was no conflict. If down the road there is an agreement to be negotiated between M1W and the SVBGSA then there could be a conflict of interest, but right now there isn't one.

Member Williamson called for a weighted vote once a motion was on the floor.

Member Gaglioti moved to deny certification of the SEIR and terminate any further action on the expansion project, which was seconded by Member De La Rosa.

Member Moore made a substitute motion to approve Resolution 2020-07, which was seconded by Member Campbell.

SUBSTITUTE MOTION:

ACTION TAKEN: It was moved by Member Moore, seconded by Member Campbell to approve Resolution 2020-07, a resolution (1) Certifying the Final Supplemental Environmental Impact Report (SEIR) for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, (2) Adopting California Environmental Quality Act Findings, (3) Approving Mitigation Measures and a Mitigation Monitoring and Reporting Program, and (4) Adopting a Statement of Overriding Considerations, which motion failed by the following roll call vote:

Ayes: MCWD (2), Monterey (3), Pacific Grove (2), Seaside (3)

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Noes: Boronda (1), Castroville (1), County of Monterey (1), Del Rey Oaks (1), Salinas (6), Sand City (1)

Absent: None

Member Gaglioti moved to deny certification of the SEIR and terminate any further action on the expansion project, which was seconded by Member De La Rosa.

ACTION TAKEN: It was moved by Member Gaglioti, seconded by Member De La Rosa to deny certification of the Final SEIR and terminate any further action on the expansion project, which motion failed by the following roll call weighted vote:

Ayes: Castroville (1), County of Monterey (1), Del Rey Oaks (1), Salinas (6), Sand City (1)

Noes: Boronda (1) MCWD (2), Monterey (3), Pacific Grove (2), Seaside (3)

8. INFORMATIONAL ITEMS

A. Pure Water Monterey Update

Pure Water Monterey Program Manager Lindow provided an update on the Pure Water Monterey Project and answered questions from the Board.

9. STAFF REPORTS

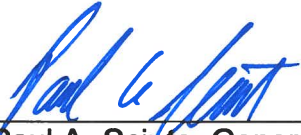
General Manager Sciuto indicated Business Services Manager/CFO Marsh was going to provide a financial update but due to the time, would postpone it to the Budget/Personnel Committee meeting on May 8, 2020.

10. BOARD MEMBER COMMENTS/REPORTS

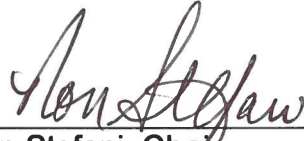
None

11. ADJOURNMENT

At 9:56 pm, with no further business, Chair Stefani adjourned the meeting to the next regular meeting on Thursday, May 21, 2020 at 6:00 PM.



Paul A. Sciuto, General Manager
Secretary to the Board



Ron Stefani, Chair
M1W Board of Directors

EXHIBIT B

CALIFORNIA COASTAL COMMISSION

455 MARKET STREET, SUITE 228
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885
WWW.COASTAL.CA.GOV

**Th3a & 4a**

Appeal Filed:	May 22, 2019
49th Day:	Waived
Permit Filed:	October 28, 2019
180th Day:	April 25, 2020
Extension ¹	September 25, 2020
Staff:	T. Luster-SF
Staff Report:	August 25, 2020
Hearing Date:	September 17, 2020

**STAFF REPORT: DE NOVO APPEAL
and
CONSOLIDATED COASTAL DEVELOPMENT PERMIT**

Appeal No:	A-3-MRA-19-0034
Local Government:	City of Marina
Decision:	Denial
Application No.:	9-19-0198
Applicant:	California American Water Company
Applicants:	California American Water Company, Brian LeNeve, Castroville Community Services District, and Commissioners Howell and Uranga
Project Location:	Wellfield at the site of the CEMEX, Incorporated sand mining facility in the City of Marina, Monterey County, and pipelines and associated infrastructure within the Cities of Marina and Seaside, the County of Monterey, and the Commission's retained jurisdiction.
Project Description:	Construct and operate a slant well field, associated water transmission pipelines and related infrastructure

¹ On April 16, 2020, Governor Newsom signed Executive Order N-52-20, which, among other things, suspended certain Coastal Act and Permit Streamlining Act deadlines for a period of 60 calendar days. Cal-Am also provided a 90-day extension, as allowed under the state's Permit Streamlining Act.

within the coastal zone to support a proposed desalination facility located inland of the coastal zone.

Staff Recommendation:

~~Denial~~[Approval with conditions](#) of De Novo Permit;
~~Denial~~[Approval with conditions](#) of Regular Permit

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EXHIBITS

[SEE ATTACHED INDEX](#)

[SUBSTANTIVE FILE DOCUMENTS](#)

[SEE ATTACHED INDEX](#)

~~As addressed in Section II.O this report, the Commission finds that the Pure Water Expansion Project is a feasible alternative to the proposed Project with fewer environmental justice impacts than Cal-Am's Project. It would provide adequate current and future water supplies to meet the area's water needs in a more affordable manner and would also eliminate adverse coastal impacts and reduce environmental justice concerns consistent with the Commission's Environmental Justice Policy and Coastal Act Sections 30604(h) and 30107.3.~~

O. ASSESSMENT OF ALTERNATIVES

Coastal Act Section 30233 states, in relevant part:

(a)The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1)New or expanded port, energy, and coastal-dependent industrial facilities~~---~~...

Coastal Act Section 30260 states:

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded ~~coastal-dependent~~coastal- dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Summary

As noted previously, Coastal Act Section 30233 does not apply to the proposed Cal-Am Project because the Project does not propose diking, filling, or dredging of coastal waters. Nevertheless, the proposed Project is subject to ~~two~~ Coastal Act ~~provisions~~Section 30260 and an LCP provision that explicitly require the Commission to determine whether there are feasible and less environmentally damaging alternatives to the proposed Project. As described below, the Commission has evaluated an alternative project – the Pure Water Expansion project – to determine whether it would be feasible, whether it would conform to the same project objectives and criteria applied to Cal-Am's proposed Project during its CEQA review, whether it would provide adequate water, and whether it would have fewer adverse environmental effects. Based on the analysis provided below, the Commission concludes that the Pure Water Expansion project provides is not a feasible ~~and less environmentally damaging~~ alternative to the proposed Project.

The Commission also considered another potential alternative – a smaller desalination facility that would produce about half as much drinking water as Cal-Am's currently proposed facility. However, a smaller facility would result in only slightly reduced impacts to ESHA and potentially reduced impacts to nearby wetlands and vernal ponds due to less groundwater drawdown if it is determined that those wetlands and vernal ponds are hydraulically connected to the

Dune Sand Aquifer. It is also likely that a smaller facility would have higher costs for each unit of water produced.

Overview

~~The While the~~ proposed Project is not subject to Coastal Act Section 30233, the Project is subject to ~~two~~ Coastal Act provisions Section 30260 and an LCP provision requiring an assessment of alternatives. One of the tests of Coastal Act Section 30233 is to determine, for ~~proposed Projects such as this~~ projects that involve filling coastal waters or wetlands, whether there is a feasible and less environmentally damaging alternative.⁴⁰⁴¹⁵⁴ The first test of Coastal Act Section 30260 requires a similar, though slightly different test: a coastal-dependent industrial project that does not comply with other Coastal Act policies may be approved if alternative locations are infeasible or more environmentally damaging. In addition, the second test of Section 30260 requires a finding that denial of a ~~coastal-dependent~~ coastal dependent industrial facility would adversely affect the public welfare. ~~As detailed herein, the question of whether there is a feasible alternative is relevant to the Commission's finding that denial of the project would not adversely affect the public welfare~~ The third and final test of Section 30260 requires a finding that adverse environmental effects are mitigated to the maximum extent feasible. Furthermore, and as noted in Section ~~IV~~ F of these Findings, the City of Marina LCP includes provisions that incorporate Coastal Act Section 30260. The alternatives assessment herein applies to the proposed Project components both in the Commission's consolidated permit jurisdiction (i.e., components in its original jurisdiction and in areas within the County's and Seaside's jurisdiction that the Commission is reviewing pursuant to the consolidated permit) and in the City's LCP jurisdiction (i.e., components that are now before the Commission on appeal).

The California Environmental Quality Act ("CEQA") provides additional guidance regarding consideration of alternatives. The Commission's regulations require staff reports to include findings evaluating the conformity of a proposed development with the requirements of Public Resource Code (CEQA) section 21080.5(d)(2)(A), which, in turn, requires that "an activity will not be approved or adopted as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen a significant adverse effect that the activity may have on the environment." As a CEQA responsible agency, the Commission's role is more limited than that of the CEQA lead agency, in that the Commission is responsible "for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve."¹⁵⁵

As part of its consideration of Cal-Am's Project under its own authority, the CPUC acted as the lead agency in drafting and certifying an Environmental Impact Report (EIR) under CEQA. Pursuant to both its CEQA authority and its authority to determine whether to issue a certificate of public convenience and necessity to Cal-Am for the proposed Project, the CPUC defined the project objectives and analyzed various alternatives.⁴⁰²¹⁵⁶ As the CPUC explained:

⁴⁰⁴¹⁵⁴ Coastal Act Section 30108 defines "feasible" ~~as:~~ accordingly: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

¹⁵⁵ CEQA Guidelines, § 15096, subd. (g)(1); Pub. Resources Code, § 21002.1, subd. (d).

⁴⁰²¹⁵⁶ See the following for the ~~PUC's~~ CPUC's decision and CEQA documents: https://www.cpuc.ca.gov/Environment/info/esa/mpwsp/comms_n_docs.html.

The primary purpose of the MPWSP is to replace existing water supplies that have been constrained by legal decisions affecting the Carmel River and Seaside Groundwater Basin water resources. SWRCB Order 95-10 requires CalAm to reduce surface water diversions from the Carmel River in excess of its legal entitlement of 3,376 acre-feet per year (afy), and SWRCB Order 2016-0016 (“Cease and Desist Order”) requires CalAm to develop replacement supplies for the Monterey District service area by December 2021. In 2006, the Monterey County Superior Court adjudicated the Seaside Groundwater Basin, effectively reducing CalAm’s CalAm’s yield from the Seaside Groundwater Basin from approximately 4,000 afy to 1,474 afy.⁴⁰³¹⁵⁷

The CPUC analyzed a variety of alternatives to the project that would meet most of the basic project objectives. One alternative that the PUC CPUC analyzed in detail was the Pure Water project. As described more fully below, the Pure Water project is a water recycling and aquifer storage and recovery project that will treat existing streams of wastewater and inject the water into the ground for later use. Cal-Am initially proposed constructing a 9.6 mgd desalination facility; however, as an alternative to the 9.6-mgd desalination facility, Cal-Am’s application also included a 6.4-mgd desalination facility coupled with a water purchase agreement for 3,500 acre-feet per year of treated water from the Pure Water project. The CPUC found that it would be feasible, less expensive, and less environmentally damaging for Cal-Am to build the smaller desalination plant and purchase 3,500 acre-feet per year of treated water from the Pure Water project. It therefore required that Cal-Am implement that project alternative.

Alternatives Analysis and the Public Trust Doctrine

Underlying the Commission’s consideration and decision on this proposed Project are its responsibilities to protect public trust resources and to ensure any approved use of those resources does not harm them. For this proposed Project, public trust resources to be considered are those held in common by society and are associated with tidal and submerged lands, including the seawater this desalination facility proposes to use, the fish and wildlife that rely on those lands, public access to the beach and public trust lands, as well as the quality of, and the ecological and aesthetic values associated with, these resources.⁴⁰⁴¹⁵⁸ When considering whether to approve projects that may affect public trust lands, agencies must consider the effects that the projects will have on interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests. Because the Coastal Act requires protection of public access, coastal habitats, recreation, and other public trust-related resources, analysis of a project’s consistency with the Coastal Act (and, by extension, an LCP) generally serves as an adequate analysis of a project’s consistency with public trust principles. However, these Coastal Act and LCP policies should be interpreted

⁴⁰³¹⁵⁷ See <https://www.cpuc.ca.gov/Environment/info/esa/mpwsp/PD.html>

⁴⁰⁴¹⁵⁸ The Public Trust Doctrine is a long-held legal construct of American property law. The essence of the Public Trust Doctrine is that the public has the right to use and enjoy lands underlying navigable waterbodies. Its most common historic uses have been to ensure the public has access to navigable waters and tidelands for navigation, commerce, fishing, and shellfish harvest. However, the doctrine is flexible enough to encompass changing public needs, and over time courts have recognized that the doctrine encompasses other resources and uses, including boating, swimming, fishing, hunting, and all recreational purposes, as well as other ecological and aesthetic values.

consistent with public trust principles, and given the resources at stake in this case, it is appropriate to briefly address public trust issues directly here.

Cal-Am's proposed Project would entail the use of seawater, a public trust resource, in a manner that would not harm that particular resource, ~~but could result in adverse effects to others. For example, the proposed Project's construction is likely to adversely affect several. Further, with the implementation of the Final EIR/EIS mitigation measures and the Commission's Special Conditions, Cal-Am's Project is protective of other public trust resources as well. For example, adequate measures have been taken to protect~~ sensitive species ~~(particularly Western snowy plovers)~~ and their habitat along the shoreline, ~~both of which are public trust resources. It is not clear at this point whether during construction. Additionally,~~ the discharge from Cal-Am's facility will adequately protect ocean water quality, another public trust resource, ~~although which the Regional Water Board will regulate that discharge and is also required to consider the public trust in its decisions.~~ Cal-Am's Project will not take up space on, or affect, tidelands that provide public access, except perhaps for short-term impacts during some work on the wastewater outfall. Its proposed method of intake for seawater appropriately protects marine water and wildlife public trust resources, as well.

Importantly, Cal-Am's proposed Project is intended in part to correct an ongoing harm to other public trust resources – the fish, water flows, and water quality of the Carmel River. Cal-Am's Project would end the ongoing overwithdrawal of water from the Carmel River that have reduced the value and benefits of those resources for several decades. ~~as required by the CDO from the State Water Board. Therefore, for the reasons discussed herein,~~ Cal-Am's proposal ~~therefore requires consideration of how to balance the harm and benefits to the public trust from this Project. As described in this Alternatives section and 30260 Override section, however, there is an alternative project that would protect the would not harm and instead would benefit~~ public trust resources ~~in the Carmel River and that would not involve as many impacts to coastal and public trust resources as this proposed Project.~~

Background on the Pure Water project: The Pure Water project is operated by Monterey One Water and was funded by Monterey One Water, along with Cal-Am and ~~the Monterey Peninsula Water Management District ("MPWMD").~~ It has also received support from both the state and federal governments, including \$88 million in grants from the U.S. EPA and a \$15 million construction grant from the State Water Resources Control Board.

The Pure Water project has been designed and built to recycle and treat water from several sources, including treated wastewater, stormwater, agricultural runoff, and food processing water. It includes four separate treatment methods – ozone, membrane filtration, reverse osmosis (similar to that done in desalination facilities), and disinfection with ultraviolet and hydrogen peroxide. These treatments occur after most of its source water has already undergone primary and secondary treatment at the Monterey One Water wastewater treatment facility.

After treatment, the Pure Water project injects the water into the Seaside Groundwater Basin for use by Cal-Am and for longer-term storage in the event of drought. The project was designed to have up to eight wells – up to four deep injection wells and up to four shallower wells – with initial production of up to about 1,000 acre-feet per year, short-term (i.e., first three years of operation) production of 3,950 acre-feet per year, and longer-term production of about 3,700 acre-feet per year. The Pure Water project started operating in March 2020 with two deep and

two shallow wells and is now injecting approximately 170 acre-feet per month of water into the Basin for later use by Cal-Am's customers.

On June 18, 2020, Monterey One Water provided a project status report that described operations and production to date, which include lower than expected injection volumes. The report also recommended several modifications to increase those injection volumes and to repair small surface sinkholes at two of the well sites. The expected corrective work involves well cleaning and sinkhole-related repairs, expected to be completed by this upcoming winter, and installing an additional deep well, which would be done by the end of 2021. ~~These types of initial issues are not unusual for water treatment and desalination facilities, as they must contend with, and adjust to, variations in water sources, chemical treatments, processing methods, and other concerns. For example, during its first year of operations, the Orange County Water District's Groundwater Replenishment System – one of the world's largest and most advanced – produced about 55% of its expected yield.¹⁰⁵ Similarly, the Carlsbad desalination facility produced about 80% of its expected production during its first year of operations and about 72% of its expected production during its first three years of operations.¹⁰⁶~~ At this time, it is not clear whether these proposed measures will enable the Pure Water project to perform as planned, and it is speculative to assume that the project will be able to provide its promised production. Monterey One Water estimates that the Pure Water project is currently capable of annual injection rates of 2,030 acre-feet per year, amounting to less than 58 percent of the 3,500 acre-feet per year allocated to Cal-Am under its existing Water Purchase Agreement with Monterey One Water and MPWMD for Pure Water project water.

Relatively late in the CPUC's multi-year hearing process, some parties to the proceeding raised the possibility that the Pure Water project could be further expanded to supply an additional 2,250 acre-feet per year of water beyond the 3,500 acre-feet per year originally proposed. The CPUC declined to open a new phase of the proceeding to consider this alternative in detail, citing the need to complete the already-lengthy ~~PUC~~CPUC process, the then-existing uncertainties about the proposed Pure Water Expansion, and the need for Cal-Am to meet mandatory deadlines for ending its excess withdrawals from the Carmel River and Seaside Groundwater Basin. Nonetheless, the CPUC ~~briefly considered~~evaluated the Pure Water Expansion alternative, and ~~found, based on the information available at the time, that the~~determined that the proposed Expansion was not developed in enough detail and did not yet provide enough certainty for the CPUC to determine that it was a reliable, affordable, and concrete alternative that could be implemented in a timely fashion. It also found that the Pure Water Expansion would not produce enough water to obviate the need for some desalination, and that a smaller desalination facility (that would have produced 4.8 mgd) was not reasonable, in part because it would have virtually the same costs as a larger plant and would not avoid or substantially lessen any significant impacts. Although it did not require Cal-Am to pursue the Pure Water Expansion as part of its project, the CPUC required Cal-Am to provide later updates on the progress of the Pure Water Expansion and stated that purchase of water from the Expansion might be required if the desalination project was delayed. The baseline Pure Water project was designed and built so that it could readily accommodate the additional equipment and components needed for the Pure Water Expansion.

¹⁰⁵ ~~See, for example, The Orange County Groundwater Replenishment System, in Water Conditioning & Purification Magazine, May 10, 2009 (at <http://wcponline.com/2009/05/10/orange-county-groundwater-replenishment-system/>).~~

¹⁰⁶ ~~Available at San Diego County Water Authority: <https://www.sdcwa.org/>~~

Consideration of Alternatives – Pure Water Expansion

The Coastal Commission, as part of its duties to analyze the project's conformity with the Coastal Act and LCP, as well as its duties as a responsible agency pursuant to CEQA, now ~~has an independent obligation to consider~~considers alternatives to the project based on current information. Notably, during the approximately two years since the CPUC last collected water supply and demand data and the CPUC issued its Final EIR, there is new information about the Pure Water Expansion, including available source water for the Expansion, and about water demand in Cal-Am's service area ~~that support the Commission's consideration of a feasible and less environmentally damaging alternative.~~ Recent analyses of water supply in Cal-Am's Monterey District service area demonstrate that Cal-Am's supply, with implementation of the Pure Water Expansion, but without the additional supply to be provided by the Project, cannot meet even the most conservative demand scenarios proposed to the Commission.

~~Cal-Am has contended, in a June 30, 2020 letter to Commission staff, that the above-referenced Coastal Act provisions do not allow the Commission to consider whether the Pure Water Expansion is a feasible alternative to its proposed Project. It states that~~As noted above, because the proposed Project would not include any "fill"⁴⁰⁷¹⁵⁹ for purposes of Section 30233, ~~and that the Commission therefore has no ability to conduct the~~is not conducting an alternatives analysis ~~required by that section~~ to determine whether there are alternatives to placing fill in coastal waters. ~~Cal-Am contends that the~~The anchors of the temporary monitoring buoys required for the project do not constitute fill and ~~further notes that these~~the anchors would not be permanent. ~~However, these concrete anchors clearly fall within the Coastal Act's "fill" definition, as they are a "substance or material" that would be "placed in a submerged area." Further, the definition does not distinguish between temporary and permanent fill, though in this case, the anchors would be in place for at least six years, which the Commission generally considers to be more than a "temporary" period of time. Additionally, the proposed retrofit of the existing outfall, involving the placement of inclined nozzles to up to 172 diffuser ports on the outfall and replacing the existing outfall end gate with a check valve, would similarly constitute fill, as these represent a "substance or material" to be "placed in a submerged area" (and further, would represent permanent fill, needed for the operational life of the proposed Project).~~ When considering the use of temporary anchors for the recommissioning of the Charles E. Meyer Desalination Facility in Santa Barbara, the Commission did not invoke Coastal Act section 30233 at all.¹⁶⁰ This issue is discussed further in Section IV.H above.

With respect to any potential fill associated with potential modifications to the Monterey One Water diffuser, as described above, the potential modifications to the Monterey One Water outfall are not part of Cal-Am's CDP application, and will be separately considered when Monterey One Water seeks to complete that work.

~~Cal-Am also contends that~~In addition, the alternatives analysis required under Section 30260 allows the Commission to only consider alternative locations for ~~its project~~the proposed Project, not entirely different alternative projects. ~~Cal-Am states that it is not aware of instances when the Commission has interpreted Section 30260 to allow consideration of~~

⁴⁰⁷¹⁵⁹ Coastal Act Section 30108.2 defines "fill" as: "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area."

¹⁶⁰ See Staff Report, Application No. 9-14-1781 (Jan. 30, 2015), available at <https://documents.coastal.ca.gov/reports/2015/2/f12b-2-2015.pdf>.

~~alternative projects. However, the~~ Although the Commission has previously interpreted Section 30260 to allow consideration of a wide variety of different alternatives, including alternative technologies and methods for accomplishing a project's objectives. ~~Examples include the Commission's consideration of alternative intake technologies for a desalination facility¹⁰⁸ and alternative methods to obtain information related to seismic risks.¹⁰⁹ Allowing the Commission to broadly consider various types of alternatives helps carry out Section 30260, which is an override provision that permits construction of development that has impacts that are inconsistent with Coastal Act protection standards. If there is another way to fulfill the main objectives of a coastal-dependent industrial facility—whether it is through an alternative location or alternative technologies or facilities—then the override should not be used.~~ it has not previously interpreted Section 30260 to allow consideration of wholly separate alternative projects outside of the Coastal Zone.¹⁶¹

~~Cal-Am also incorrectly asserts that the Commission, as a responsible agency under CEQA, may only consider alternative project locations within the coastal zone. First, this is incorrect, as courts emphasize that, pursuant to CEQA, agencies “may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required.” *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal. 3d 553, 575. Although an agency may consider jurisdictional issues in determining whether an alternative is feasible and could actually be approved by that agency, agencies are not precluded from considering potentially feasible alternatives that are outside of their jurisdiction. Of course, a responsible agency could not itself approve an alternative that is outside of its jurisdiction or otherwise not within its power to approve. But that fact is not relevant here, where the Commission is only determining whether a potentially feasible alternative exists and whether denial of the project would not harm the public welfare.~~

~~Second, the Commission's duty to consider alternatives in this case does not arise solely due to CEQA, and Cal-Am cites no Coastal Act provision that limits the Commission's consideration of alternatives to those inside the coastal zone.¹⁴⁰ In practice, the Commission has often considered alternatives that are outside of the coastal zone. Examples include the Commission's findings for the three spent nuclear facilities located within the coastal zone at Humboldt Bay, Diablo Canyon, and San Onofre. In each instance, the Commission evaluated whether there was an alternative onsite location, but also whether there was an alternative storage facility elsewhere, including outside the coastal zone and, in fact, outside of California. In each instance, the Commission found that there were no feasible alternatives to the proposed projects that~~

¹⁰⁸ <https://documents.coastal.ca.gov/reports/2008/6/Th17a-6-2008.pdf>

¹⁰⁹ <https://documents.coastal.ca.gov/reports/2012/11/W13b-11-2012.pdf>

¹⁶¹ See, e.g., Staff Report for Test Slant Well, App. No. 9-14-1735, A-3-MRA-14-0050, pp. 3, 57 (evaluating on- and off-site alternative locations for the test slant well).

¹⁴⁰ ~~Cal-Am cites *Sierra Club v. Cal. Coastal Com.* (2005) 35 Cal.4th 839, 860, claiming that it holds that neither the Coastal Act nor CEQA allow the Commission to consider impacts of projects located outside the Coastal Zone. But that case is not on point; it merely held that development outside of the coastal zone is not subject to CDP requirements and that the Commission may not deny a CDP for development in the coastal zone due to effects it will have outside of the coastal zone. See Pub. Res. Code § 30604(d). These situations are not present here.~~

~~could be located elsewhere, which was a determination it could only reach by conducting the analysis Cal-Am contends the Commission cannot do.~~

~~Further, Cal-Am bases part of its contention on the CPUC's previous, but now outdated, determination that the Pure Water Expansion was too speculative. As noted elsewhere in these Findings, the Pure Water Expansion has been designed to be integrated into the existing Pure Water project and has undergone significant CEQA review, so it has advanced sufficiently to be considered an adequately reliable water supply project.~~

Nevertheless, the parties have engaged in extensive alternative analyses of the Pure Water Monterey Expansion project, and an alternatives assessment of the Pure Water Monterey Expansion is being provided herein.¹⁶² The Findings below describe the Pure Water Expansion ~~and demonstrate that the Expansion is not a feasible~~ alternative ~~and its feasibility, ability to meet~~ capable of meeting project objectives, ~~and ability to protect or protecting~~ the public welfare.

Fundamentally, Cal-Am's proposed Project is a water supply project that, when combined with the other water sources in Cal-Am's water supply portfolio, would allow Cal-Am to reduce its withdrawals from the Carmel River to no more than its maximum legal limit, while providing enough water for Cal-Am's existing and future water demands. As described below, the Pure Water Expansion ~~provides~~ does not provide a feasible ~~and/or~~ less environmentally damaging alternative to Cal-Am's proposed Project – ~~that would nor could it~~ protect the public welfare by providing adequate regional water supplies for the coming decades. The Pure Water Expansion would be located at the same site and would use the same water sources, treatment methods, and aquifer injection/extraction methods as the Pure Water project ~~to, but it is speculative to assume that the Expansion can~~ supply an additional 2,250 acre-feet per year, ~~all of which would be available to Cal-Am.~~ Further, even under the lowest estimates of demand for Cal-Am's service territory (10,855 acre-feet per year) provided to the Commission by MPWMD, supply in Cal-Am's service area with the Pure Water Expansion, but without the Project, would not be sufficient to meet demand. Reliance on the Expansion without the Project would result in a water supply deficit on the Peninsula, and the Pure Water Expansion is therefore incapable of meeting basic project objectives. Therefore, it cannot be considered a feasible alternative to the Project.

The Findings below evaluate and compare the Pure Water Expansion and Cal-Am's proposed Project in five main ways:

- 1) ~~4)~~ **Feasibility:** The Pure Water Expansion is evaluated using the criteria of the Coastal Act's definition of "feasible."
- 2) ~~2)~~ **Water supply and demand:** Each project is evaluated as to whether it would provide the expected amount of water needed for current and future demands.

¹⁶² The Commission also acknowledges Cal-Am's argument that the Commission, as a responsible agency under CEQA, may only consider alternative project locations within the coastal zone. An agency may consider jurisdictional issues in determining whether an alternative is feasible and could actually be approved by that agency. In practice, however, the Commission has in certain instances considered alternatives outside of the coastal zone. In any case, the Commission need not resolve this issue. Even if the Commission could consider alternatives beyond the coastal zone, the Pure Water Expansion Project is not a feasible alternative, as discussed below.

- 3) ~~3)~~ **Project objectives and criteria:** Each project is described as to how it meets the project objectives developed for Cal-Am by the CPUC in its Decision and Final EIR/EIS. Additionally, the Pure Water Expansion is described in relation to the nine criteria the CPUC used to evaluate the initial Pure Water project and to determine ~~that~~whether it would be a suitable and reasonable component of ~~Cal-Am's~~Cal-Am's water supply portfolio.
- 4) ~~4)~~ **Adverse environmental effects:** The two projects are compared as to what overall adverse environmental effects they would cause.
- 5) ~~5)~~ **Areas of Uncertainty:** Both projects involve some degree of uncertainty, though not in the same issue areas.

1) Feasibility

Each project is briefly evaluated for conformity to the criteria of the Coastal Act Section 30108 definition of feasibility – i.e., “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.”

- “Capable of being accomplished in a successful manner~~Both~~”: While Cal-Am’s desalination facility and the Pure Water Expansion ~~ty~~ would use proven technology to produce and deliver drinking wa~~ter~~. ~~Just as Cal-Am is proposing to use treatment processes common to other seawater desalination facilities in operation around the world, the Pure Water~~ ter, there remain serious concerns regarding the Pure Water Expansion’s ability to deliver a reliable water supply.

☐ Pure Water Project Technological Issues. The Pure Water Expansion would use the same treatment processes now being used by the baseline Pure Water project and ~~by other water recycling projects in California and elsewhere. The Pure Water Expansion~~ is essentially ~~a larger~~an expanded version of the same Pure Water project that Cal-Am is relying on for a part of its expected water supply. ~~Given that the Pure Water Expansion would use the same processes as PWM and would be located at the Pure Water facility, which is designed to include this expansion, it is therefore capable of being successfully accomplished from a technological standpoint.~~However, the Pure Water project itself is currently facing significant technological barriers that call into question Monterey One Water’s ability to utilize this same technology for the Pure Water Expansion. Monterey One Water is currently unable to inject treated water at rates originally promised for the Pure Water project. The existing Pure Water project shallow injection wells are being affected by sinkholes and/or subsidence, and are not currently injecting any water—indeed Monterey One Water believes the shallow wells may only ever be capable of operating at 25 percent of planned capacity.¹⁶³ Additionally, the Pure Water project deep injection wells are experiencing injection refusal and are only operating at injection rates of 70 percent or less. Monterey One Water has stated that the deep wells may only ever inject treated water at 1,600 to 1,800 gpm, out of a planned 2,000 gpm. As such, Monterey One Water estimates that the Pure Water project is currently capable of annual injection rates of only 2,030 acre-feet per

¹⁶³ August 12, 2020 Cal-Am Letter to Commission, p. 2.

year—this is less than 58 percent of the 3,500 acre-feet per year allocated to Cal-Am under the existing Water Purchase Agreement for Pure Water project water.

~~In its June 30, 2020 letter to the Commission, Cal-Am contends that the Pure Water Expansion would not meet this criterion of feasibility because of the above-referenced start-up problems with its wells and injection rates and because of uncertainties about the quality of its source waters, particularly from agricultural operations. However, as noted above, the start-up problems are of a type that can readily be resolved, and in fact, Monterey One Water has developed the methods and schedule for adding a new well and improving conditions at the existing wells to allow for the full expected production. Regarding the quantity of the Pure Water project's source water supply, Monterey One Water has contracts and agreements in place for more than enough water actually needed to provide the Pure Water project's expected production volumes, which would allow it to operate even if some sources are not available or are available in lesser amounts, and the Final Supplemental Environmental Impact Report ("FSEIR") prepared for the Pure Water Expansion concludes that there is adequate water for the facility. Regarding the quality of source water, and as noted above, the Pure Water project is designed to take already treated water from Monterey One Water's other treatment facility and then apply four additional treatment methods designed to handle the expected source waters. The Pure Water project's treatment methods are similar to those used in other recycled water treatment facilities in California and elsewhere. An August 20, 2020 letter from Monterey One Water addresses Cal-Am's contentions and clarifies that Cal-Am's concern about inadequate wastewater was based on incorrect analyses and that its concern about source water quality is misplaced because the Pure Water project has already successfully treated water from agricultural operations, as it is approved to do so by the State Water Board's Department of Drinking Water.¹⁴⁴~~

In order to address these issues with the Pure Water project, Monterey One Water is proposing a series of remedies, including repairs to the shallow wells, final commissioning of the deep injection wells, and construction of a third deep well beginning in November.¹⁶⁴ Monterey One Water also has proposed the potential addition of a fourth deep well in an attempt to address injection refusal issues.¹⁶⁵ The FSEIR for the Pure Water Expansion analyzed a total of five deep wells for both components of the Pure Water project,¹⁶⁶ including two deep wells for the initial Pure Water project and three deep wells for the Pure Water Expansion. Now that up to four deep wells may be necessary for the Pure Water project, and three deep wells still appear to be needed for the Pure Water Expansion, this will exceed the number of wells the FSEIR analyzed. Any more than five deep wells will require additional environmental analysis that has not been conducted or

¹⁴⁴ See August 20, 2020 letter from Monterey One Water to Tom Luster re: Response to Requests for Clarification regarding Latham & Watkins, LLP letter dated August 13 regarding Monterey Peninsula Water Supply Project CDP Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034.

¹⁶⁴ August 12, 2020 Cal-Am Letter to Commission, p. 2.

¹⁶⁵ See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10 (discussing amending bid request for the third deep injection well to include construction of a fourth deep injection well), available at <https://montereyonewater.org/290/Audio-Recordings-of-Board>.

¹⁶⁶ PWM Expansion Draft SEIR, p. 2-22.

circulated for public review and comment.

In total, Monterey One Water estimates that these remedies will increase Pure Water project costs by roughly \$13 million—however, it is not certain that Monterey One Water’s proposed actions will allow it to deliver the promised quantities of Pure Water project water to Cal-Am. It is also unclear when or if Monterey One Water will resolve these issues, and it is speculative to assume that these issues will be resolved by CDO deadline of December 31, 2021. It appears likely that the proposed Pure Water Expansion could face similar barriers to implementation. Importantly, to achieve the MPWMD’s lowest demand estimate of 10,855 acre-feet per year, 100 percent of the promised water supply from the Pure Water project (3,500 acre-feet per year) plus 100 percent of the promised water supply from the Expansion (2,250 acre-feet per year) would be required.

Pure Water Expansion Source Water. There also remains significant uncertainty regarding the availability of source water for the Pure Water Expansion. At the moment, many of the water rights that Monterey One Water states are available for the Pure Water Expansion are in fact not permanent water rights, but instead are interruptible use entitlements, many of which are also disputed by the owners of the corresponding water rights.¹⁶⁷ For instance, the Amended and Restated Water Recycling Agreement (“ARWRA”) between Monterey One Water and MCWRA contains multiple requirements and conditions regarding the construction, operation, and financing of new source water for the Pure Water project.¹⁶⁸ The ARWRA sets forth multiple outstanding conditions that are required to be completed before the ARWRA can become effective, which was acknowledged by the SEIR for the Pure Water Expansion.¹⁶⁹ Monterey One Water and MCWRA amended the agreement in June 2019 to allow additional time to address the conditions while allowing M1W to use the new source waters for the PWM Project until the conditions are met. However, the conditions to the ARWRA have yet to be satisfied and it is speculative to assume when the agreement will become effective. Therefore, the reliability of certain ARWRA source waters for even the Pure Water project are speculative due to the dispute concerning unmet conditions that must be satisfied before sources of water become fully secured.¹⁷⁰ Additionally, reliance on agricultural produce wash water as a source for the Pure Water Expansion is speculative because the City of Salinas disputes Monterey One Water’s ability to use that water for the Expansion and asserts that the ARWRA only permits Monterey One Water to use agricultural produce wash water for the original Pure Water project.¹⁷¹ Salinas explains that these water sources are not available for the Pure Water Expansion because “the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City’s agriculture industry, as determined by the City in its sole and absolute discretion.” Therefore, these sources cannot be relied upon

¹⁶⁷ August 12, 2020 Cal-Am Letter to Commission, p. 4.

¹⁶⁸ June 30, 2020, Cal-Am Letter to Commission, p. 50.

¹⁶⁹ PWM Expansion Draft SEIR, p. 4.18-5.

¹⁷⁰ June 30, 2020, Cal-Am Letter to Commission, p. 50.

¹⁷¹ Exhibit 27 – April 27, 2020 City of Salinas Letter to M1W; June 30, 2020, Cal-Am Letter to Commission, p. 51.

in determining the available source waters for the Pure Water Expansion.

Further, Monterey One Water's source water projections for the Pure Water Expansion do not account for the inherent uncertainty in utilizing wastewater as source water for the Expansion, given the variability in wastewater availability from year-to-year and under drought conditions.¹⁷² As drafted, Appendix I to the Pure Water Expansion Final Supplemental EIR ("FSEIR"), which describes source water availability for the Expansion, does not consider wastewater treatment plant ("WWTP") flows since 2013, or the fact that WWTP flows generally correlate to area water demand and use, which have been decreasing on the Monterey Peninsula over time. As such, Appendix I overstates the availability of WWTP flows for use as Expansion source water.

The Pure Water Expansion FSEIR specifically asserts that WWTP flows should be based on 2009 to 2013, when WWTP flows were 21,764 af, or a worst case flow of 20,090 acre-feet per year based on the 2013 drought year.¹⁷³ However, a separate appendix to the FSEIR indicates that WWTP flows were reduced to 18,810 acre-feet per year in 2018.¹⁷⁴ This number was not utilized in the FSEIR to calculate available WWTP flows as source water for either the Pure Water project or Pure Water Expansion. Further, Monterey One Water presented additional data regarding WWTP flows to its Ad-Hoc JPA Revision Committee on July 20, 2020, indicating that since the beginning of 2020, WWTP flows are reduced to 17,980 acre-feet per year.¹⁷⁵

Monterey One Water recently provided the Commission with post-2013 WWTP flow data in an August 20, 2020 letter that confirms WWTP flows have continued to decrease since 2013 and were 18,875 in 2019. Therefore, this post-2013 flow data demonstrates that WWTP source water supplies for the Pure Water Expansion in Normal/Wet years are significantly less than as stated in the FSEIR and are unavailable to the Pure Water Expansion during Dry years.¹⁷⁶ Moreover, this newly-available WWTP flow data may constitute significant new information regarding the Expansion's impacts, thereby requiring recirculation of the Pure Water Expansion FSEIR for renewed notice and comment. (CEQA Guidelines, § 15088.5, subd. (a); *Laurel Heights Improvement Assn.*, *supra*, 6 Cal.4th at p. 1129.)

In addition, the Pure Water projects also depend heavily on surface water flows for their projected source water. However, the most recent data available from the

¹⁷² See Exhibit 25, pp. 6-7 – California American Water Peer Review of Supply and Demand for Water on the Monterey Peninsula, Hazen and Sawyer, August 11, 2020 ("August 11, 2020 Hazen Memo").

¹⁷³ Pure Water Expansion SEIR, April 2020, Appendix I – Source Water Availability, Yield, and Use Technical Memorandum, Tables 8-11.

¹⁷⁴ Pure Water Expansion SEIR, April 2020, Appendices to the M1W Draft Supplemental EIR 11-7-2019 -Appendix E - Water Quality and Statutory Compliance Report-Appendix C – Projected Monthly Flows of Source Waters to the Regional Treatment Plant Influent.

¹⁷⁵ Exhibit 25 – August 11, 2020 Hazen Memo, p. 7, Exhibit 5.

¹⁷⁶ See See Exhibit 24, p. 6 – California American Water Peer Review of Peer Review of August 20, 2020 Letter from M1W to CCC, Hazen and Sawyer, August 23, 2020 ("August 23, 2020 Hazen Memo).

U.S. Geological Survey (“USGS”) shows that average surface water flows from the Reclamation Ditch are lower than assumed in the FSEIR, and therefore the FSEIR overstates the availability of this source water.¹⁷⁷ Further, agricultural flows have decreased by 1/3 in recent years, meaning that monthly flows to the Blanco Drain and the Agricultural Wash Water are also below what is projected in the FSEIR, and further limiting available sources for the Pure Water Expansion.

Accounting for these lower WWTP flows and decreased supply from the Reclamation Ditch, the existing demands for the source waters listed in the FSEIR for the Pure Water Expansion far exceed available supplies in both Normal/Wet years and Dry years.¹⁷⁸ Without an adequate source water supply, Peninsula water users will be forced to choose between supplying source water for the Pure Water Expansion or the Castroville Seawater Intrusion Project (“CSIP”), the reduction of which may cause significant environmental impacts, such as additional seawater intrusion, which have not been analyzed.¹⁷⁹

Pure Water Expansion EIR. Finally, Monterey One Water is not moving forward with the development of the Pure Water Expansion and does not appear to have resources dedicated to the project, such that the Pure Water Expansion would be capable of being accomplished in a successful manner.¹⁸⁰ On April 27, 2020, the Monterey One Water Board of Directors denied certification of the FSEIR for the Pure Water Expansion.¹⁸¹ The Monterey One Water Board acknowledged that major deficiencies remain unaddressed in the FSEIR related to its analysis of Expansion source water, Peninsula water supply and demand, impacts to agricultural water supplies, and the FSEIR’s failure to evaluate the Pure Water Expansion as either an alternative to or a cumulative project with the Cal-Am project. Monterey One Water acknowledges that it does not possess the funding to fix the gaps in the Pure Water Expansion FSEIR, and as such, the Monterey One Water Board has ordered its staff to stop all work on the Expansion. The impact of limited funding to complete adequate environmental review also will affect Monterey One Water’s ability to recirculate the SEIR, as may be required under CEQA.

~~Cal-Am and other commenters have also recently asserted that Monterey One Water will not have enough source water for the Pure Water Expansion because some of water would be directed to other uses or that the above-referenced contracts and agreements did not contemplate use of the water for the Expansion, just for the baseline Pure Water project. However, the above-referenced Monterey One Water letter refers to the Pure Water Expansion project’s Final SEIR analysis that showed, using conservative assumptions about these expected source water supplies, sufficient quantities will be available for the combined projects (see additional discussion below).¹⁴²~~

¹⁷⁷ Exhibit 25 – August 11, 2020 Hazen Memo, Exhibit 7.

¹⁷⁸ Exhibit 24 – August 23, 2020 Hazen Memo, p. 6.

¹⁷⁹ Exhibit 25 – August 11, 2020 Hazen Memo, pp. 13-14.

¹⁸⁰ See June 30, 2020 Cal-Am Letter to Commission, pp. 47-48.

¹⁸¹ See May 20, 2020 Monterey One Water Board of Directors Staff Report.

¹⁴² ~~See Final Supplemental EIR—Proposed Modifications to the PWM/GWR Project, and Appendix M: M1W Source Water Technical Memorandum, April 2020.~~

Unless and until the Monterey One Water Board chooses to move forward with correcting and thereafter certifying the FSEIR, the Pure Water Expansion is on indefinite hold. Moreover, without a certified SEIR, Monterey One Water cannot obtain any discretionary permits necessary to construct the Pure Water Expansion. As such, the Pure Water Expansion is not currently capable of being accomplished in a successful manner.

- **“Within a reasonable period of time”:** Cal-Am’s facility is expected to take about 21 months to construct and about six months to commission and begin operations. The Pure Water Expansion has a projected construction and start-up schedule of about 24 to 27 months total. If each project received all final approvals and started construction today, ~~Cal-Am’s facility could be providing both projects would be on similar timelines and would be expected to provide~~ water by early ~~2024, whereas the Pure Water Expansion could provide water by late 2022~~2023. At this point, neither project can anticipate being online and able to provide water by ~~the~~ December 2021 CDO deadline, which is the date by which Cal-Am is required to end its overpumping of the Carmel River. ~~However, Cal-Am has sufficient water in storage that would allow it to end its overpumping by that deadline without reducing supplies to its customers.~~
- For either project, the actual timeline to produce drinking water is likely to take somewhat longer, as complex water treatment facilities such as these often require several months of adjustment to achieve their expected production level or needed level of treatment. An additional consideration is that both projects have additional approvals necessary before they can begin operation, as well as other potential obstacles that could adversely affect their feasibility and schedule. The main issues that could affect the timing of each project are briefly discussed below, and these and other issues are also further addressed at the end of the Alternatives section in the subsection regarding Areas of Uncertainty.

The primary remaining elements needed for the Pure Water Expansion are certification of its ~~Final Supplemental EIR (FSEIR)~~, approval by the CPUC of a Water Purchase Agreement, and final state and federal approval for its modified discharge into coastal waters. ~~The Monterey One Water Board considered certifying the FSEIR at its April 27, 2020 meeting. The vote to certify it failed by a vote of 10 to 11. There was then a motion to deny certification of the FSEIR and terminate any further action on the Expansion project, which also failed on a vote of 10 to 11. The effect is that the FSEIR was not certified but that the Board remains free to reconsider the FSEIR and project approval at a future hearing, if it so chooses. The main area of controversy that was raised during the FSEIR public comment period relates to whether there is an adequate water supply for the Expansion. As noted above, the FSEIR concludes that the water supply is adequate for the Expansion, and some evidence and arguments submitted by parties to this proceeding have not demonstrated otherwise. As noted above, the Monterey One Water Board has denied certification of the Pure Water Expansion FSEIR due to ongoing flaws in the FSEIR’s analysis, including the availability of source waters. Monterey One Water does not currently possess the funding to fix these deficiencies, and has therefore ordered its staff to suspend work on any part of the Pure Water Expansion.~~

Moreover, if the flaws in the FSEIR are corrected, Monterey One Water would be expected to recirculate the FSEIR for additional notice and comment to account for the significant new information related to the post-2013 WWTP flows recently

made publicly available, including the identification of alternate and verifiable source waters as necessary.¹⁸² Further, should Monterey One Water choose to construct a fourth deep injection well for the Pure Water project, it would also be required to recirculate the Pure Water Expansion FSEIR to allow for additional notice and comment on the addition of this well and the likely need to add further wells for the Expansion. In total, this recirculation process will likely add an additional six to twelve months to the Pure Water Expansion's timeline—demonstrating that the Pure Water Expansion cannot be completed in a "reasonable period of time."

In terms of the Water Purchase Agreement, the Pure Water Expansion ~~would not~~cannot proceed until such an Agreement in place, because that Agreement ~~would be~~is needed to secure funding for the project. As the FSEIR states: "Without knowing when or whether a Water Purchase Agreement will be negotiated, it is currently not possible to estimate when the Proposed Modifications would be completed." ~~However, Cal-Am is the party that would need to pursue the~~Moreover, any Water Purchase Agreement, ~~and it could likely do so expeditiously if it so desired. Given that the main barrier to securing that Agreement is a barrier that Cal-Am largely has control over, any uncertainty related to when an Agreement can be reached should not be considered when analyzing the timing and feasibility of the Pure Water Expansion. Finally, while the Pure Water Expansion will require additional review and permits for its expected discharge, that discharge will be similar to the discharge of the already permitted baseline Pure Water project, so much of the necessary analysis has already been completed.~~for Pure Water Expansion water would need to incorporate additional terms beyond those included in the Pure Water project Water Purchase Agreement, including guarantees from Monterey One Water of the full production volume for the Expansion, and a full indemnification for Cal-Am against any risk, liability, or penalties in the event that the Expansion fails to provide an adequate supply.¹⁸³

Further, with respect to the Water Purchase Agreement for the original Pure Water project, "Significant Events of Default" may have already occurred with respect to the Delivery Start Date and the Performance Start Date for the Pure Water project.¹⁸⁴ Monterey One Water has repeatedly delayed the Performance Start Date for the Pure Water project.

As noted by the State Water Resources Control Board, the timeline for the Pure Water Expansion has been delayed beyond the CDO deadline of December 31, 2021, and the Expansion requires "approvals and funding for which the details are uncertain and the timeline is indefinite"—as such, "[i]t is uncertain whether or

¹⁸² Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; *Cadiz Land Co. v Rail Cycle* (2000) 83 Cal.App.4th 74, 95 (holding that an EIR required revision and circulation to incorporate important new information about a project's potential impacts identified in expert reports submitted after the final EIR was completed); *Save Our Peninsula Committee v. Monterey Cty. Board of Supervisors* (2001) 87 Cal.App.4th 99, 131 (holding that information regarding a new mitigation measure, which was only added to the record after the EIR was completed, should have been included in the EIR and recirculated for public review and comment).

¹⁸³ See Exhibit 28 – May 9, 2020 Cal-Am Letter to Monterey One Water, p. 5.

¹⁸⁴ See August 12, 2020 Cal-Am Letter to Commission, p. 1.

when the proposed [PWM Expansion] may proceed beyond its currently pending environmental review . . .”¹⁸⁵ Accordingly, it does not appear that the Pure Water Expansion could be constructed and operational within a reasonable period of time as compared to the Cal-Am project.

For its part, Cal-Am faces a variety of hurdles that could delay construction and operation of its project. First, it ~~needs to design, and likely must~~ obtain one or more permits to install the outfall liner in Monterey One Water’s outfall line. The CPUC analyzed the potential environmental effects of such work, including likely impacts to ESHA and potential impacts to endangered species (specifically the Western snowy plover), and assumed that an additional CDP would be needed to undertake this work. It is possible that CDPs would be needed from Monterey County, the City of Marina, and the Commission to allow installation of the outfall liner. ~~If that ends up needing to occur, it could take significant time for the City and others to analyze the impacts of such a project and act on a permit.~~ However, Cal-Am ~~is investigating whether it may be able~~ has proposed to install the needed liner entirely from inside the outfall without any ground-disturbing activity in the coastal zone, which may allow the installation to occur without all or some of the above requirements for permits. (See Special Condition 4.)

Cal-Am also needs to either obtain approval by the Marina Coast Water District to allow Cal-Am to use a shared water delivery pipeline or else design, conduct environmental review for, and obtain needed permits for Cal-Am to construct a new section of water delivery pipeline between its facility and its service area, which would lie outside the coastal zone. On October 17, 2019, the Marina Coast Water District determined that the pipeline did not have sufficient capacity to accommodate Cal-Am’s expected water volumes, and ~~it has rejected Cal-Am’s assertion that~~ although it appears that existing agreements permit Cal-Am ~~has to utilize~~ the right to use the shared pipeline to convey product water from the desalination plant. To help resolve this issue, ~~the Monterey Peninsula Water Management District~~ MPWMD, on July 30, 2020, considered approving an addendum to a CEQA document that would have allowed Cal-Am to construct a parallel pipeline that would serve the jointly managed Aquifer Storage and Recovery water supply system and would have also allowed Cal-Am to transport water to its service area. However, ~~the District declined to approve that~~ MPWMD’s decision on addendum, ~~so it is unclear whether that option will be available to Cal-Am~~ has been delayed until its October Board meeting. Additionally, the pipeline construction would occur outside of the coastal zone but within an area that may have unexploded ordinance from the former Fort Ord, so it would be subject to additional review through completion of a Munitions Response Remedial Investigation/Feasibility Study (“MR RI/FS”) and approval by Monterey County of an excavation permit.¹⁴³

There is also ongoing litigation related to various aspects of Cal-Am’s proposed Project. This includes litigation filed by the City of Marina and later joined by Marina Coast Water District contending that Cal-Am is not able to use more than 500 ~~acre-feet~~ acre- feet per

¹⁸⁵ See May 8, 2020 State Water Board Letter to John Ainsworth, Coastal Commission, pp. 4-5.

¹⁴³ ~~See July 2020 Addendum No. 6 to the Aquifer Storage and Recovery Project Environmental Impact Report/Environmental Assessment for the Bypass Pipeline & De-Chlorination Facility Modification, available at: <https://www.mpwmd.net/wp-content/uploads/ASR-Addendum-No.6-July-2020.pdf> (accessed July 17, 2020).~~

year of groundwater from the CEMEX site.¹⁴⁴ The CPUC analyzed the same claims that have now been made in the litigation and, after consulting with the State Water Board, determined that it was reasonably foreseeable that Cal-Am had a path forward to obtain the necessary water rights. The CPUC recognized that its proceeding was not an adjudication of water rights and that such rights would likely have to be definitively resolved at a future time by the appropriate body, such as a court. However, its conclusion was that questions regarding water rights were not so serious as to compromise project feasibility. It does not appear that this framework through which Cal-Am may appropriate groundwater rights can be modified by this litigation. There is also litigation challenging Monterey County's environmental review of the desalination facility and some pipelines outside of the coastal zone that are a part of the desalination project. As of the publication date of these Findings (August 24, 2020), there is a temporary stay on construction, which, ~~as imposed by the Superior Court in mid-September 2019, is in effect until August 25, 2020, at which time the court will consider extending or modifying the stay.~~ will likely be lifted following the Commission's decision on the Cal-Am Project. On balance, it does not appear that the Cal-Am's Project faces more significant delays in implementation than would be faced by the Pure Water Expansion.

"... and taking into account the following factors":

- "Economic": There remains significant uncertainty regarding the costs for Pure Water Expansion water, given the significant cost overruns that have been experienced during implementation of the Pure Water project.¹⁸⁶ The CPUC has previously approved a rate of \$1,720 or less per-acre-foot for water produced by the Pure Water project. In June 2020, Monterey One Water stated that at the current projected delivery rate of 2,030 acre-feet per year, Pure Water project water costs would increase to \$3,678 per-acre-foot—a 115 percent increase over the approved rate.¹⁸⁷ Even under the best case scenario put forward by Monterey One Water under which delivery of the promised 3,500 acre-feet per year is achieved, after the aforementioned fixes to the Pure Water project, including repairs to the shallow wells, commissioning of deep wells, and the addition of a third deep well, costs would be 2,508 per-acre-foot – representing a 50 percent increase from the rate approved by the CPUC.¹⁸⁸ Moreover, Monterey One Water may decide to install a fourth, costly deep injection well.¹⁸⁹ It appears likely that Pure Water project costs will continue to rise, and it is reasonable to assume that the Pure Water Expansion would face similar cost overruns. As such, there is uncertainty regarding final construction and water costs for the Pure Water Expansion.

~~"Economic":~~ The expected costs of Cal-Am's proposed Project are much higher than those of the Pure Water Expansion. Cal-Am and its ratepayers would be paying an

¹⁴⁴ See Monterey County Superior Court Case No. 20CV001387, filed by the City of Marina against RMC Lonestar and RMC Pacific Materials, LLC (together known as "CEMEX") and Cal-Am.

¹⁸⁶ See June 30, 2020 Cal-Am Letter to Commission, p. 52.

¹⁸⁷ See Pure Water Monterey Status Update Presentation.

¹⁸⁸ August 12, 2020 Cal-Am Letter, p. 3.

¹⁸⁹ See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10.

estimated \$400 million in initial capital costs for the overall project, along with operational and maintenance costs of about \$1 billion or more during its initial 30 years of operations. The Pure Water Expansion is estimated to have about \$60 million in initial capital costs and about \$190 million in operational and maintenance costs over a 30-year operating life. although as discussed above, such costs are expected to increase.

Although the desalination facility would produce more water than the Pure Water Expansion, its cost per unit of water would be much higher. ~~At current expected costs, ratepayers would pay about \$6,000 to \$8,000 per acre-foot for Cal-Am's water and about \$2,300 per acre-foot for the Pure Water Expansion supply.~~ However, current costs projections for Pure Water Expansion do not account for costs already spent on the Cal-Am desalination facility, which will be recovered via water rate increases that could increase customer bills by approximately \$10 to \$20 per month even if the desalination facility is never built. Further, regardless of the cost per acre-foot for desalination facility water, that cost is not going to materially affect the costs for the desalination facility on the water bills of Cal-Am's customers. This is because the CPUC already determined the rate increase for Cal-Am's customers for the desalination facility based on a calculation of the annual revenue required to repay capital costs to build the facility, including set financing repayment requirements, and the annual facility operations and maintenance. How much water the facility ultimately produces (or does not produce) is not a material variable in rates that customers are charged, except for minor, incremental operating and maintenance costs. Thus, whether the project produces 2,000 acre feet or 10,000 acre feet of water each year, the amount needed to be recovered annually from customers for physical construction and operation of the facility and for financing/loans essentially remains the same. Based on available information, the CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single family residence for the desalination facility, and that increase is not tied to per acre foot water costs.¹⁹⁰ That is why the CPUC found that approving a smaller 4.8 MGD desalination facility would not result in any "significant, if any, cost savings to ratepayers" and determined that alternative was not feasible. (CPUC Decision 18-09-017, p. 129.) As a result, the speculative per acre foot water costs being projected by Commission staff and Pure Water Expansion proponents are not relevant to any consideration by the Commission of how rates for the desalination facility will impact Cal-Am's customers.

~~In its June 30, 2020 letter, Cal-Am pointed out that the above-referenced Monterey One Water status report on the Pure Water project identified higher than expected first year operating costs – instead of about \$2,442 per acre-foot, Monterey One Water expects the first year's costs to be about \$3,678 per acre-foot. Cal-Am contended that the Pure Water Expansion would likely experience a similar increase. However, that same Pure Water project status report noted that Monterey One Water expects that once repairs are complete and a new well is~~

¹⁹⁰ See August 13, 2020 Latham Letter to Commission, p. 1, Exhibit 1, p. 3 n.4 (citing Attachment C-1 to Advice Letter No. 1220-A from California-American Water Company to CPUC). As noted above, the Commission recently approved a project – the Morro Bay Water Reclamation Facility – that would result in a \$41 increase in water bills.

~~installed, costs will be about \$2,508 per acre-foot, still substantially less than Cal-Am's costs. In addition, the costs of Cal-Am's Project have risen and are likely to continue to rise.~~ Over the last several years, costs to construct ~~the plant~~ Cal-Am's Project have increased from about \$223 million to \$279 million. Its expected cost per acre-foot of water have increased from an estimated \$5,100 in 2012 to a recent estimate of about \$6,100.¹⁴⁵ The desalination cost per acre-foot would be even higher for some period of time, since Cal-Am would be operating at less than full capacity, which results in higher per unit costs. As discussed in Section IV.N, *supra*, the average single-family Cal-Am customer's monthly water bills are expected to increase by approximately \$37 to \$40 once the Project begins producing desalinated water.¹⁹¹ However, as discussed above, there remains significant uncertainty regarding construction costs and water rates for the Pure Water Expansion.

- **“Environmental”:** This factor is discussed in more detail below, under the comparison of the projects' environmental effects, and elsewhere in these Findings. ~~In general, however, and as~~ Certain commenters have raised concerns regarding the Cal-Am Project's potential impacts to environmentally sensitive habitat areas and groundwater, and its effects on marine life related to brine discharge. As noted in the Findings above, Cal-Am's proposed Project would ~~result in several significant adverse effects on coastal resources—including environmentally~~ be inconsistent with Coastal Act and Marina LCP policies regarding sensitive habitat ~~areas, groundwater, and effects on marine life from its brine discharge—whereas the Pure Water Expansion would be built entirely outside the coastal zone (though would discharge effluent in the coastal zone) and have relatively few environmental impacts compared to Cal-Am's Project, including wetland/vernal pond ESHA; however the Project would incorporate mitigation to the maximum extent feasible. (See Sections IV.E, G, *supra*.) In addition the Project would be consistent with Coastal Act and Marina LCP policies regarding coastal waters with the implementation of Special Conditions. (See Section IV.I, *supra*.) Further, the Cal-Am Project will be consistent with policies regarding groundwater without Special Conditions. (See Section IV.J, *supra*.)~~ □ “Social”: ~~As described more below and in the report's Findings on Section 30260's public welfare test, both projects would provide sufficient water for the Cal-Am's service area, though Cal-Am's would have far greater environmental justice-related effects on low-income ratepayers and other communities of interest (see Section II.N—Environmental Justice).~~ Significant questions remain unresolved regarding the environmental impacts of the Pure Water Expansion, and the FSEIR for the Expansion requires additional analysis as discussed above. As a result of these flaws, the Monterey One Water Board denied certification of the FSEIR for the Expansion. Moreover, Monterey One Water has not evaluated the potential impacts from seawater intrusion to the Salinas Valley Groundwater Basin, should the Pure Water Expansion be constructed in place of the Cal-Am Project.¹⁹² Thus, substantial evidence does not

¹⁴⁵ ~~See California-American Water, “Monterey Supply Project Scenarios,” CPUC workshop for A.12-04-019, December 11-13, 2012. Current cost estimates are based on Cal-Am's Advice Letter 1220, Attachment C-3, December 31, 2018.~~

¹⁹¹ As noted above, the Commission recently approved a project – the Morro Bay Water Reclamation Facility – that would result in a \$41 increase in water bills.

¹⁹² See January 30, 2020 Cal- Am Comments on Pure Water Expansion DSEIR, pp. 17-18.

demonstrate that the Pure Water Expansion will have fewer environmental impacts compared to the Cal-Am Project.

- “Social”: It is likely that the proposed Project would result in increased costs of water for Cal-Am ratepayers, and thereby may involve environmental justice-related effects on low income ratepayers and other communities of interest. (See Section IV.N, *supra*.) However, as described above, Cal-Am offers rate assistance programs for low-income ratepayers, and as required in Special Condition 13, Cal-Am must develop and submit for CPUC approval additional ratepayer assistance programs to address possible barriers to access, customer outreach, and the need to offset rate increases for low-income customers. Moreover, Cal-Am intends to offer discounted water rates to Castroville, a community of concern whose water supply has diminished in recent decades due to overpumping—the Commission has imposed conditions to ensure that Cal-Am’s customers in other nearby disadvantaged communities will not be required to absorb the costs of providing this discounted water.

The Pure Water Expansion is likely to cause a series of environmental justice impacts to communities on the Monterey Peninsula. First, Monterey One Water currently proposes to utilize upwards of 3,700 acre-feet per year in agricultural produce wash water generated in the City of Salinas in order to produce the 2,250 acre-feet per year planned for the Expansion. However, the City of Salinas disputes Monterey One Water’s rights to use these agricultural wash waters, which the City argues is needed to “support farmers, ranchers, and the City’s agriculture industry.”¹⁹³ (See Section IV.N, *supra*.) Second, as discussed below, implementation of the Pure Water Expansion, without the proposed Cal-Am Project, will not allow Cal-Am to provide sufficient water to meet even MPWMD’s lowest projections of demand within its Monterey Service Area. As discussed in Section IV.N, *supra*, without a sufficient water supply, there will be insufficient water to construct affordable housing on the Monterey Peninsula, which will in turn drive up current housing costs, forcing employees in the service industry on the Peninsula to reside in more affordable inland communities and contend with lengthy commutes to their jobs on the Peninsula. These workers will then have to bear additional economic burdens, including the cost of gasoline or other transportation, in order to travel to the Peninsula. Third, as noted above, because WWTP flows that Monterey One Water relies upon as Pure Water Expansion source water are continuing to decline, in most situations there would be insufficient source waters to supply both the Expansion and the CSIP. Without sufficient source water to supply CSIP, seawater intrusion in the Salinas Valley Groundwater Basin will continue to progress, disproportionately affecting the residents of the disadvantaged community of Castroville. (See Section IV.N, *supra*.)

- **“Technological”:** ~~As noted above, both projects would generally use proven technology for treating and distributing water.~~ The Cal-Am project would use a slant well system to provide its source water, and although there are no other operating desalination facilities known to use this system, there are at least two projects ~~here~~ in California where slant wells were successfully tested as a method to supply source

¹⁹³ See January 29, 2020 City of Salinas Letter to Monterey One water, pp. 1-2.

water to desalination facilities.¹⁴⁶¹⁹⁴ Moreover, subsurface slant wells are the type of intake technology preferred by the state resources agencies, including the Commission, for desalination facilities under the California Ocean Plan.¹⁹⁵ The Pure Water ~~project uses a train of~~ Expansion would utilize four different treatment methods ~~commonly used in water treatment facilities. Cal-Am, which are currently being used by~~ the Pure Water project ~~and the Pure Water Expansion all rely in part on an Aquifer Storage and Recovery (“ASR”) system that is being used in numerous locations as a proven method to store and provide water supplies. As. However, as~~ noted above, the Pure Water project ~~has experienced some start-up issues, which are relatively common during the initial operations of water treatment facilities, and Monterey One Water has identified proposed solutions and a schedule to implement them.~~ is currently facing significant technological and logistical difficulties in both construction and startup, including failures in the Pure Water project injection wells. Given that the Pure Water Expansion will rely on the same technologies currently being used by the Pure Water project and is proposed for the same location as the Pure Water project, it is likely that the Pure Water Expansion would face similar barriers to construction and implementation. As such, the Cal-Am Project’s use of the preferred slant well technology renders it the more technologically feasible water supply solution for addressing demand on the Peninsula.

2) Water supply and demand – would the Pure Water Expansion provide sufficient amounts of water to allow Cal-Am’s ~~water~~ portfolio to meet expected demands?

In comparing the Pure Water Expansion with Cal-Am’s Project, key issues include: 1) whether either project would provide an adequate and reliable water supply to meet current and future demands; 2) whether either would be consistent with state requirements regarding the design and capacity of water supply facilities; and 3) whether they would allow Cal-Am to meet conditions of the State Water Board’s cease and desist order for reducing withdrawals from the Carmel River.

~~Although~~ Cal-Am’s desalination facility would provide more reliable and drought resilient water supply than would the Pure Water Expansion, ~~either project, when. When~~ combined with Cal-Am’s other available water sources, ~~would provide more than~~ and when considering the most conservative projections of demand from the MPWMD (10,855 acre-feet per year), only Cal-Am’s Project is capable of providing adequate water supplies for current and expected future demands and ~~would allow~~ allowing the water system to conform to the state’s design and capacity requirements. ~~Adding either project~~ Only the addition of the Project to Cal-Am’s water portfolio would ~~also~~ allow Cal-Am to reduce its withdrawals from the Carmel River in accordance with requirements of the State Water Board’s ~~cease-and-desist order. Importantly, although~~ CDO. While the CPUC’s 2018 decision described the Pure Water Expansion as speculative, it recognized that, if built, it would satisfy ~~projectsome~~ objectives and could provide sufficient water if the desalination facility was delayed for five to fifteen

¹⁴⁶¹⁹⁴ Along with Cal-Am’s test slant well, the South Coast Water District in Orange County conducted successful slant well tests and has proposed using them for its full-scale desalination facility in Dana Point.

¹⁹⁵ See California Ocean Plan, section III.M.2.d(1)(a).

years.¹⁴⁷~~With~~¹⁹⁶ Nevertheless, the CPUC concluded that a desalination would be necessary to meet the Peninsula's long term water supply needs. Now that more information is available concerning the Pure Water Expansion based on its SEIR and subsequent expert analysis, it is now evident that despite the currently lower baseline demand described below, the Pure Water Expansion ~~can be expected to provide~~^{is not capable of providing} the necessary amount of water ~~for at least 20 to 25 years~~^{to meet that demand} without the desalination facility in place.

The CPUC's 2018 Final EIR/EIS and its Final Decision described Cal-Am's current and future expected water needs and available supplies. However, the baselines and assumptions used in those analyses have since been updated with new data and projections. In September 2019, ~~the Monterey Peninsula Water Management District ("MPWMD")~~ published its *Supply and Demand for Water on the Monterey Peninsula* (see Exhibit ~~1517~~ – "MPWMD 2019 Update"), which was supported by recent data that were not available at the time of the CPUC review.¹⁴⁸¹⁹⁷ In March 2020, the MPWMD provided an additional update ("MPWMD 2020 Update" – see Exhibit ~~1618~~) that incorporates more recent data and responds to comments received on its September 2019 report. Cal-Am, through its expert Hazen and Sawyer, provided updated data on water supply and demand on January 22, 2020, August 11, 2020 and August 23, 2020. Monterey One Water also provide an update as to the availability of source water for the Pure Water Expansion Project on August 20, 2020. The evaluation below compares the earlier CPUC projections with those of the 2019 and 2020 Updates and the Hazen analyses using the same criteria that were used in the CPUC analysis, along with several others, to identify how either the Pure Water Expansion or the Cal-Am desalination facility would provide for the expected water supply and demand needs for Cal-Am's service area. The CPUC's analyses and projections showed that adding Cal-Am's desalination facility to its water supply portfolio would provide about 109% of its identified needed future water supplies – about ~~15,296~~^{15,296} acre-feet of supply versus 14,000 acre-feet of demand. The most recent analyses and projections, which start at a lower baseline but include a relatively high growth rate, show that adding the Pure Water Expansion instead of the desalination facility to the portfolio would, in most cases, ~~result in a similar "overage" of~~

¹⁴⁷ ~~The CPUC decision states: "...the PWM Expansion would satisfy the basic and key purposes of the Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years." See CPUC Decision D.18-09-017, Appendix C, p. C-71.~~

¹⁹⁶ The CPUC decision states: "...the PWM Expansion would satisfy the basic and key purposes of the Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years." See CPUC Decision D.18-09-017, Appendix C, p. C-71.

¹⁴⁸¹⁹⁷ According to the ~~District's~~^{MPWMD's} website statement, it serves over 100,000 people within the cities of ~~Carmel-by-the-Sea~~^{Carmel-by-the-Sea}, Del Rey Oaks, Monterey, Pacific Grove, Seaside, and Sand City, the Monterey Peninsula Airport District, and portions of unincorporated Monterey County including Pebble Beach, Carmel Highlands and Carmel Valley. It is a public agency funded largely by property taxes, user fees, water connection charges, investments, grants, permit fees and project reimbursements. ~~The District~~^{MPWMD} operates pursuant to five main goals:

- 1) Increase the water supply to meet community and environmental needs.
- 2) Assist California American Water in developing a legal water supply.
- 3) Protect the quality of surface and groundwater resources and continue the restoration of the Carmel River environment.
- 4) Instill public trust and confidence.
- 5) Manage and allocate available water supplies and promote water conservation.

~~water supply, which provides a measure of reliability~~fail to provide adequate water supplies to meet demand.

Determining the amount of water needed for current and future demands involves three main steps: 1) identify existing water use; 2) identify the expected rates of growth; and 3) identify the sources of water needed to serve that growth. As acknowledged in the CPUC's Final EIR/EIS, "[f]orecasting future demand and supply is not an exact science," and "estimating future water demand necessarily entails the use of assumptions about demand factors that cannot be predicted with absolute certainty."¹¹⁹¹⁹⁸ This uncertainty leads to analyses of future water needs often being based on relatively conservative assumptions to ensure that errors are generally on the side of ensuring more water is available rather than not enough.¹²⁰~~The~~¹⁹⁹

~~First the~~ Findings ~~below first~~ describe the basis for the CPUC's projection of Cal-Am's expected water supply and demands, which served as the basis for the CPUC's approval of a 6.4 mgd desalination facility.¹²¹~~They then~~²⁰⁰ Second, the Findings describe new information related to ~~those~~ expected ~~water supplies and~~ demands as evaluated in the 2019 and 2020 Updates, both of which show that current actual demand is substantially lower than identified during the CPUC's proceedings. Third, the Findings describe the availability of Cal-Am water sources and the reliability of supply sources to feed the Pure Water Project. The Findings then compare how much water Cal-Am would have available in its current and future water portfolio with the proposed desalination facility or with the Pure Water Expansion project. These Findings also consider a key issue fundamental to Cal-Am's expected water supplies and demands – the need for Cal-Am to meet the obligations of the State Water Board's cease-and-desist order that requires Cal-Am to stop its excess water withdrawals from the Carmel River by December 2021. In sum, the Findings below show that Cal-Am could not meet its expected water needs by including ~~either the desalination facility or~~only the Pure Water Expansion, without the desalination facility, in its overall water portfolio.

CPUC's current and projected water demand

As part of the CPUC's review, it identified ~~Cal-Am's~~Cal-Am's existing and projected future water demands, relying, in part, on state regulatory requirements used to identify baseline water requirements. This regulation – the California Waterworks Standards – requires that water supply systems have the capacity to meet maximum day demand and peak hourly demand, as based on the most recent 10 years of a water system's operations.¹²²²⁰¹ The CPUC determined

¹¹⁹¹⁹⁸ See Section 8.2.13 – Master Response 13: Demand (Project Need) and Growth.

¹²⁰ ~~See, for example, the Pacific Institute's "An Assessment of Urban Water Demand Forecasts in California," August 2020, which describes common patterns and reasons that result in water districts often overestimating expected water demands.~~

¹⁹⁹ See, for example, the Pacific Institute's "An Assessment of Urban Water Demand Forecasts in California," August 2020, which describes common patterns and reasons that result in water districts often overestimating expected water demands.

¹²¹ ~~Those analyses are provided in greater detail in Section 2.6 of the Final EIR/EIS and in the CPUC's September 13, 2018 Final Decision on the proposed project.~~

²⁰⁰ Those analyses are provided in greater detail in Section 2.6 of the Final EIR/EIS and in the CPUC's September 13, 2018 Final Decision on the proposed project.

¹²²²⁰¹ See Title 22, CCR Division 4, Chapter 16, Section 64554. Maximum day demand is determined by selecting the month with the highest water use during the past ten years ~~of~~ service, dividing by the number of days in that month, and multiplying the average daily use by a peaking factor of at least 1.5.

that, for Cal-Am, using the peak month demand would be the critical determinant as to whether the proposed Project could meet its maximum day and peak hour demand, as peak month represents an elevated demand sustained over multiple days.¹²³²⁰² At the time of the CPUC review, the peak month during the 10-year period from 2006 to 2015 was July of 2010 when Cal-Am's ratepayers used 1,111 ~~acre-feet~~acre- feet. The average annual demand during that 10-year period was 12,351 acre-feet.

The CPUC also considered several events that occurred before, during, and after that 10-year period that had affected the area's rate of water use. It recognized that water demand in the area had been somewhat higher long before that particular 10-year period and that it had declined in part due to reduced visitation to the Monterey Peninsula after the events of September 11, 2001 and due to the recession that occurred between 2007 and 2009. It also recognized that California, including Cal-Am's service area, had experienced several years of drought conditions that had further reduced water use and led to implementation of a number of water conservation measures, many of which were still in place and likely represent permanent reductions in the expected water use per capita in the Monterey area and elsewhere. This was accompanied by behavior changes by water users that led to additional reductions, which may or may not be as long-lived as the structural conservation measures but may nonetheless continue to some degree beyond the period of drought conditions due, in part, to continued changes in behavior, increases in the price of water, and other factors. The CPUC also acknowledged that by the time the desalination facility would be operating, Cal-Am's average 10-year and maximum year demands would be lower than the above-referenced 10-year period. Based on these considerations, the CPUC concluded that the existing annual demand was about 12,000 acre-feet per year.¹²⁴²⁰³

Along with identifying these existing water system demands, the CPUC considered several expected future demands that it noted would increase that existing demand by about 2,000 acre-feet per year for a total expected demand of about 14,000 acre-feet per year. Table 4 below shows the expected existing demand and these expected future demands, which are described below.

Table 4: CPUC identified existing and future demand

	CPUC review (totals in acre-feet <u>acre-</u> <u>feet</u> per year)
Existing demand (10-year annual average):	12,000

Peak hourly demand is determined by calculating the average hourly rate for the maximum day demand and multiplying by a peaking factor of 1.5.

¹²³²⁰² This was also reflected in the CPUC's inclusion of a project objective in the Final EIR/EIS that was to ensure the water supply would be able to serve peak month demands. The CPUC's September 13, 2018 Final Decision on the project notes that "[t]his is consistent with Cal-Am's assertion that peak month demand is a more critical consideration for its operations than peak day demand. This appears undisputed, as all of the parties presented their demand projections in a similar method (see, E.g., Exhibit SF-12 Attachment A) and we use monthly and annual figures throughout in our consideration of the standard."

¹²⁴²⁰³ The CPUC's Final Decision states that "[a] projection of demand for existing customers of approximately 12,000 afy is appropriately conservative and reasonable."

Future demand:	
● ▲ Pebble Beach water entitlements	325
● ▲ Hospitality industry rebound	500
● ▲ Lots of record	1,181
Total:	14,006

- Pebble Beach water entitlements:** As part of a water reclamation project funding agreement between the ~~Monterey Peninsula Water Management District~~[MPWMD](#) and the Pebble Beach Company, the ~~District~~[MPWMD](#) granted water entitlements totaling 380 ~~acre-feet~~[acre- feet](#) per year to the Company. The funded reclamation project provides reclaimed water for use on golf courses in the Del Monte Forest area. Because that water would have otherwise come from Cal-Am's use of Carmel River water, the State Water Board recognized in its cease-and-desist order to Cal-Am that those entitlements could be considered part of Cal-Am's expected additional water demands for proposed development in this area. As of the time of the CPUC's decision, about 325 acre-feet per year of these entitlements had not been used and were therefore considered part of potential future growth.
- Hospitality industry rebound:** As noted above, the CPUC acknowledged that water demand in Cal-Am's service area had declined post-2001 and during the 2006-2009 recession, due in part to a reduction in visitation rates. Cal-Am had proposed as part of the CPUC's review that an additional 500 acre-feet per year be added to the projected future demand to reflect an expected rebound in visitation to the area. ~~The Monterey Peninsula Water Management District~~[MPWMD](#) conducted a 2013 study that determined that 500 acre-feet per year was a reasonable expectation. The CPUC accepted this figure, though it acknowledged that part of the rebound dependent on these 500 acre-feet per year had already occurred and that some of that supply would therefore be available for other uses.
- Water for lots of record:** Cal-Am's service area has several hundred undeveloped "lots of record," and it proposed that the CPUC include 1,181 acre-feet per year of water for the expected development of those parcels.

During its review, the CPUC also requested and received alternative water demand/supply scenarios proposed by intervenors. These included the same demand categories identified above, though they varied in the current and expected volumes in each category.¹²⁵²⁰⁴ These alternative scenarios proposed that the CPUC consider that expected future demands could range from about 9,700 to 15,000 acre-feet per year. In comparing and evaluating the above demand categories and the scenarios presented by intervenors, the CPUC concluded that ~~Cal-Am's~~[Cal-Am's](#) existing demands along with the above expected future demands would total about 14,000 acre-feet per year.

~~CPUC's projected available water supplies~~

¹²⁵²⁰⁴ Scenarios were provided by Cal-Am, the City of Marina, the Marina Coast Water District, the Monterey Peninsula Regional Water Authority, ~~Monterey Peninsula Water Management District~~[MPWMD](#), the Planning and Conservation League, Surfrider Foundation, the Coalition of Peninsula Businesses, and Water Plus.

The CPUC also showed that Cal-Am’s water portfolio, including production from the proposed desalination facility, would provide about 1,300 acre-feet more water than needed to serve the then-expected 14,000 acre-foot per year demand. The components of the expected water portfolio are shown in Table 5 and described below.

Table 5: CPUC identified available water supplies

Source:	Amount Available (in acre-feet per year):
Carmel River	3,376
Seaside Groundwater Basin	774
Aquifer Storage and Recovery	1,300
Sand City Desalination Facility	94
Pure Water Monterey Groundwater	
Replenishment Project	3,500
Total:	9,044
Total when including a 6.4 mgd (6,252 afy) desalination facility:	15,296

The water supply sources included:

- Carmel River: Although Cal-Am is required to reduce its withdrawals from the Carmel River, it continues to have the legal right to withdraw 3,376 acre-feet per year from the river.
- Seaside Groundwater Basin: Cal-Am has also relied on past withdrawals from the Seaside Groundwater Basin. As part of the Basin’s adjudication in 2006, Cal-Am was determined to have rights to 1,474 acre-feet per year from the Basin; however, based on its overwithdrawals from past years, Cal-Am is required to replenish the Basin at a rate of 700 acre-feet per year over a 25-year period, which limits its allowable withdrawals to 774 acre-feet per year. On August 12, 2020, the Commission received a letter from the Seaside Groundwater Basin Watermaster, who expressed concern that the Basin would need additional water – about 1,000 acre-feet per year over and above the currently proposed 700 acre-feet per year – to provide protective groundwater elevations in the Basin, and that the proposed Cal-Am facility is the only possible source for this additional supply. It appears, however, that the Basin management considered this measure in 2009 and 2013 but took no action to implement the associated infrastructure that would be needed or to fund the approximately \$6,000,000 per year needed to purchase that amount of desalinated water. Nor did the CPUC consider this large, potential additional demand for water in its proceeding. Accordingly, any such new demand for water appears to be speculative and is not considered a reason that the Pure Water Expansion would be infeasible.
- Aquifer Storage and Recovery (“ASR”): Cal-Am and the Monterey Peninsula Water Management District together implemented an ASR project that provides a water supply based on using available storage capacity in the Seaside Basin. The project involves diverting high winter flows of Carmel River water into the Basin for later recovery, treatment, and delivery to customers during summer months to help reduce summer withdrawals from the river. The winter flows it diverts are only those identified as excess to the flows needed to support the river’s

~~threatened steelhead population. The first ASR phase was completed in 2008 and allows a maximum annual diversion of about 2,400 acre-feet per year from the Carmel River, and an average yield of approximately 920 acre-feet per year. The second phase, completed in 2013, allows storage of up to 2,900 acre-feet per year and provides an average yield of 1,050 acre-feet of additional water supply. For water supply planning purposes, ASR is estimated to produce an average of 1,300 acre-feet annually.~~

- ~~☐ Sand City Desalination Facility: This facility is owned by Sand City but operated by Cal-Am. Of the facility's 300 acre-feet per year capacity, Cal-Am has available to it a long-term supply of 94 acre-feet per year.~~
- ~~☐ Pure Water Monterey Groundwater Replenishment Project: At the time of the CPUC's review, the first phase of this project — a joint proposal by the Monterey Regional Water Pollution Control Agency and the Monterey Peninsula Water Management District — had just undergone environmental review. The project involves treating several water sources — including treated wastewater, agricultural runoff water, and stormwater — and injecting the treated water into the Seaside Groundwater Basin for later additional treatment and use as a potable water supply. The CPUC's decision to approve Cal-Am's desalination facility relied on Cal-Am being able to purchase 3,500 acre-feet per year from the Pure Water project, which allowed the CPUC to reduce the size of Cal-Am's desalination facility from its initially proposed 10,700 acre-feet per year to its currently proposed 6,252 acre-feet per year (i.e., from 9.6 to 6.4 mgd).~~

~~A common principle in water planning is that having more water sources is preferred to having fewer, as more sources generally allow for more overall reliability. Most areas rely on one or two main sources (along with conservation) to meet their water needs. As shown above, Cal-Am currently has five (not counting conservation). Adding the Pure Water Expansion and including it as part of the existing Pure Water project would keep Cal-Am with five sources, while adding desalination would increase sources to six.~~

~~In summary, the CPUC identified a current baseline use of 12,000 acre-feet per year, an expected future demand of about 14,000 acre-feet per year, and an available supply, including Cal-Am's proposed desalination facility, of 15,296 acre-feet per year.~~

~~2019 and 2020~~ Updates of water supply and demand

As noted above, MPWMD prepared two updated assessments of expected water demands and supplies for Cal-Am's service area (see Exhibits [1517](#) and [1618](#)), which are collectively referred to as the "Updates" herein. The more recent Update was included as part of the Final SEIR for the Pure Water Expansion project. These MPWMD assessments updated the CPUC's evaluation of the total water demands and supplies available with Cal-Am's desalination facility as compared with supplies that would be available with the Pure Water Expansion project. Table [65](#) below provides the 2020 Update's comparison of these two supply scenarios showing that the scenario with the Pure Water Expansion would provide about 4,000 acre-feet per year less than the scenario with Cal-Am's desalination facility:

Table [65](#): Comparison of water supply portfolio with Cal-Am desalination or Pure Water Expansion

Supply Source	With Cal-Am desalination (in afy)	With Pure Water Monterey Expansion (in afy)
Cal-Am Desalination	6,252	0
Pure Water Monterey	3,500	3,500
Pure Water Monterey		
Pure Water Monterey Expansion	0	2,250
Carmel River	3,376	3,376
Seaside Basin	774	774
Aquifer Storage and		
Aquifer Storage and Recovery	1,300	1,300
Sand City Desalination	94	94
Total Available Supply	15,296	11,294
Other Available Supply	406	406
Total Available Supply w/Other	15,702	11,700

Note: to ensure a more conservative assessment of available supplies, the “Other Available Supply” category above is not included in the analyses immediately below, as that category includes some less certain water sources, such as increased production from the Sand City desalination facility, and “Carryover Credits” that Cal-Am has available to it based on unused capacity in the Seaside Groundwater Basin. However, this category is included later under “Additional considerations for projecting future demand.”

Importantly, the MPWMD also updated the current and expected future water demands the CPUC had identified during its proceedings, using the same demand categories as the CPUC had used, but including more recently available data and some modified assumptions. The Updates show that Cal-Am’s current baseline demand is substantially lower than identified by the CPUC. Using the average annual use for the past 10-year, five-year, and three-year periods, the Updates calculated the current baseline demand to be 10,863, 9,825, and 9,817 acre-feet per year, respectively – or between about 1,100 and 2,300 acre-feet less than the previously assumed 12,000 acre-feet. The Updates had the benefit of about two years of more recent data, starting in January 2018, that show continued reductions in existing water demand compared to the demand figures available to the CPUC. The Updates also show ~~that the~~ expected future demand ~~is as~~ substantially lower than had been identified previously and [hypothesize that demand](#) could be met for the next twenty years or more by adding either Cal-Am’s desalination facility or the Pure Water Expansion project to the water supply portfolio. Importantly, these Updates also evaluated the expected rate of growth in water demand, a consideration absent from Cal-Am’s Final EIR/EIS. The Updates conclude that, although the Pure Water Expansion scenario would not provide as much water as the desalination facility scenario, that scenario would provide sufficient water for twenty years or more, even when considering substantially higher growth rates than the area has ever experienced during the past several decades. ~~If~~[The Updates concluded that if](#) growth actually occurs at closer to historic rates, then the Pure Water Expansion could provide sufficient water for approximately forty years. The two sets of demand scenarios are provided in Table [76](#) below. The Updates also conclude that the Pure Water Expansion could meet the maximum daily demand and peak day flows as required by the state’s Waterworks standards. Finally, they evaluate how a Cal-Am water supply portfolio that

included the Pure Water Expansion instead of the desalination facility could provide adequate water supplies during multiple years of drought.

Importantly, and as shown in Table 76, the Updates' lower demand numbers for the ~~five-year~~five-year and three-year average annual demands are supported by data Cal-Am provided to the CPUC in July 2019. The table includes Cal-Am's 2019 existing demand as identified in its July 1, 2019 General Rate Case application to the CPUC.⁴²⁶²⁰⁵ For purposes of this ongoing rate case, Cal-Am reports that its 2018 water demand was 9,679.1 acre-feet, much less than the 12,000 acre-feet estimate in the 2018 Final EIR/EIS and even less than the lowest of the calculated baseline volumes in the ~~above-referenced~~above-referenced Updates. Cal-Am also reports that its expected demand from 2019 through 2022 is 9,789.4 acre-feet per year, which also remains below those lowest calculated baseline amounts. Cal-Am's current CPUC proceeding also includes testimony from a Cal-Am expert witness, who anticipates somewhat lower demand during these immediately upcoming years – from 9,338 in 2021 to 9,610 in 2023.

Table 76: Comparison of existing and future demand scenarios

	2018 CPUC review	<u>MPWMD</u> 2020 Update	2019 Cal-Am
Existing demand:	12,000	9,817 – 9,825	9,338 – 9,789 <u>9,338 – 9,789</u> (through 2023)
Future demand:			
Pebble Beach entitlements	325	103 to 160	
Hospitality industry rebound	500	100 to 250	
Lots of record	1,181	864 to 1,014	
Total:	~14,000 at an unspecified future date	10,884 – 11,249	

This range of current demand numbers – 9,338 to 9,825 acre-feet per year – is further supported by two recent evaluations conducted on behalf of the City of Marina and the Marina Coast Water District, which are detailed below under Other Reviews.

Future demand: The Updates also show lower expected future demands in each of the categories that the CPUC study had used, as shown below:

- **Pebble Beach entitlements:** As noted above, the CPUC had identified about 325 ~~acre-feet~~acre-feet of expected demand for build-out in the Pebble Beach area. The analyses in the Updates ~~show~~argue that the actual baseline amount was somewhat lower – about 299 acre-feet – and would be split between two categories – a 145 acre-foot expected average for buildout and a 154-acre-foot expected average in “other

⁴²⁶²⁰⁵ See July 1, 2019 application by California American Water application for CPUC's General Rate Case A1907004, available at: <https://apps.cpuc.ca.gov/apex/f?p=401:57:0>: (accessed August 10, 2020).

entitlement demand.”⁴²⁷²⁰⁶ The Updates ~~note~~argue that this buildout demand is likely overstated, in that it was based on higher water usage rates than are the current norm. For example, the buildout figures were based on a period when residences used about a third more water than the current average and included a proposed hotel that is no longer being pursued.

The Updates also conclude that the “other entitlement demand” is similarly overstated in that this demand would not exist once a new water supply – such as Cal-Am’s Project or the Pure Water Expansion – makes water available to users that would otherwise need the entitlement. These entitlements were developed as part of a financing package for an area recycling project, allowing the Pebble Beach Company to sell some of its unused water entitlements to residential property owners in the area. Over the last decade or so, these average entitlement demands have totaled about 4.9 acre-feet per year. It is unlikely that there will be additional requests for those same entitlements amounts during the approximately three years before one of these two water supply projects is online, largely because the entitlements cost about \$250,000 per acre-foot. The Updates acknowledge, however, that there could be some limited future interest in these entitlements, though more in the range of 10 to 15 acre-feet total rather than the above-referenced 154 acre-feet. The 2019 Update did not include this 10-15-acre-foot demand in its expected growth figures, though it addressed potential growth in a different way to provide sufficient conservatism in its calculations, as described below. The Updates conclude that the actual expected future demand for these categories of water use should be lowered from the previously presumed 325 acre-feet to between 103 and 160 acre-feet. Both Cal-Am and the Pebble Beach Company have contended that the full entitlement amounts may be used, though there is no certainty as to when or how quickly they might be drawn upon should this relatively high cost water be needed. However, the Pebble Beach Company has used or allocated all but 60 acre-feet of its entitlement, implying that the Updates underestimate current and future demand as a result of the Pebble Beach entitlements.²⁰⁷

- **Hospitality industry rebound/tourism bounce-back:** The 500 acre-feet the CPUC included in this category was based testimony from the local hospitality industry and on an expected recovery in the number of visitors to the Monterey Peninsula area. As part of the CPUC proceedings, the industry noted that hotel occupancy rates declined after 2001 and after the ~~2006–2009~~2006- 2009 recession and requested that the CPUC consider including additional water in its demand scenarios to serve the expected increase in occupancy rates that would accompany an improved economy. As described in the Updates, the pre-2001 occupancy rates were about 72%, dropped in 2001 to about 63%, and stayed at about that level until 2012-13. The Updates note that since then, occupancy rates have returned to the previous high pre-~~2004-2001~~ level of about 72%, yet the water use in this sector is substantially lower than it was in 2001 – about 2,442 acre-feet per year in 2018 versus 3,387 acre-feet in 2001. The Updates credit this reduction to recent mandatory conservation standards and improved conservation measures, many of which are permanent. They fail to acknowledge, though, that ~~even~~

⁴²⁷²⁰⁶ See April 2012 Pebble Beach Final Environmental Impact Report, Appendix H – Water Supply and Demand Information for Analysis. This document identifies demands wet, average, dry, and critically dry years that range from 128 to 145 acre-feet per year for buildout and 147 to 167 acre-feet per year for “other entitlement demand.”

²⁰⁷ September 10, 2020, Pebble Beach Company Letter to Costal Commission, p. 2.

~~with these improvements~~due to tiered water pricing that is in place to encourage conservation, many hotels in the region send laundry miles out of the area to be washed in less expensive service territories. Therefore, there is likely to be some “rebound” for this demand sector, ~~though it is more likely,~~ MPWMD assumes the rebound to be in the range of 100 to 250 acre-feet, without justification for those numbers, and not the 500 acre-feet referenced above.⁴²⁸²⁰⁸ The Coalition of Peninsula Businesses disputes MPWMD conclusion and notes that the “500 afa of supply was intended to include not just the return to prior levels of occupancy on the Peninsula (full-service facilities, for instance, were at occupancy levels in the high 70s to low and mid-80s during 1998-99-2000) but water use increases as the rest of the Peninsula economy recovers...”²⁰⁹ Although Cal-Am has contended that the bounceback would be higher because many of those conservation measures are temporary, MPWMD ~~confirmed~~claims that most are considered permanent, so the lower rates are likely to be long-term.

- Lots of record:** Cal-Am’s Final EIR/EIS identified an expected future annual demand of 1,181 acre-feet from development of vacant lots of record within ~~Cal-Am’s~~Cal- Am’s service area, based on a study done in 2002.⁴²⁹²¹⁰ The Updates ~~note~~argue that expected per capita or per household water use at the time of that 2002 analysis was substantially higher than current usage and argue that this expected future demand should be reduced to reflect this lower per capita use. They also ~~note~~argue that some of these lots included in this calculation are not buildable or have already been developed and are therefore already included as part of Cal-Am’s existing demand. The Updates conclude that the proposed 1,181 ~~acre-feet~~acre-feet of demand should be reduced by about 167 acre-feet to reflect reduced per capita/per household usage and by about 150 acre-feet to account for already developed or undevelopable lots. It acknowledges that some growth will occur both within and near Cal-Am’s service area, though that growth will be spread out over time rather than occur immediately. Overall, the Updates calculate the amount of new demand for this category at between 864 and 1,014 acre-feet.⁴³⁰²¹¹ Cal-Am’s June 30, 2020 letter disagrees with this lower projection, stating that once the CDO is lifted, a “pent-up demand” to build will occur. Even if that were to occur, the Updates argue that it would take many years of growth for any “pent-up demand” to reach either of the above-referenced future demand volumes. This growth issue is further detailed below.

Rate of increase for future demand: The Updates also evaluate how these overall future water demands would be developed over time. Unlike the approach taken in ~~Cal-Am’s~~Cal- Am’s Final EIR/EIS, which identified an existing demand of 12,000 acre-feet per year and a future need for 14,000 acre-feet per year but did not identify the rate at which that level of water

⁴²⁸²⁰⁸ The Final EIR/EIS also acknowledged that much of the expected rebound had occurred, that the 500 acre-foot demand expectation was long-term, and that a reasonable estimate for hospitality industry rebound would be on the order of 200 to 300 acre-feet per year. See Section 2 – Water Demand, Supplies, and Water Rights, page 2-13, and Section 6 – Other Considerations, page 6-15.

²⁰⁹ September 24, 2019, Coalition of Peninsula Businesses letter to MPWMD, p. 4.

⁴²⁹²¹⁰ The 2019 Update notes that this figure was based on a February 2002 analysis conducted by the ~~District~~MPWMD that was revised slightly upward later that year to about 1,211 acre-feet.

⁴³⁰²¹¹ This is largely consistent with ~~the District’s~~MPWMD’s testimony to the CPUC, in which it recommended the CPUC not use the 2002 figures for the reasons cited above. See Final EIR/EIS Section 2 – Water Demand, Supplies, and Water Rights, pages 2-14 & 2-15.

use would be needed, the Updates calculated expected rates of increase in demand by looking at past rates of growth in water demand and projecting them over the next several decades. They also included several additional considerations in their calculations, such as potential higher growth rates, the cost of water, and the effects of recent legislation that are expected to limit or reduce future per capita demands. These projections and other considerations are described below.

The Updates ~~found~~argue that annual water growth rates during the past 20 years, which included periods of high water availability as well as drought and imposed conservation measures, ranged from about nine to 16.4 acre-feet per year. Based on the current range of existing demand identified above – i.e., from 9,338 to 9,825 acre-feet per year – and on the total available future supplies identified above in Table 76, with Cal-Am’s desalination scenario providing about 15,296 acre-feet per year and the Pure Water Expansion scenario providing about 11,294 acre-feet per year, the Updates assert that Cal-Am’s Project would result in an immediate excess supply of between 5,471 and 5,958 acre-feet and the Pure Water Expansion would result in an immediate excess supply of between 1,469 and 1,956 acre-feet. ~~At~~The Updates claim that at the highest rate of past growth – 16.4 acre-feet per year – the total portfolio with the Pure Water Expansion would supply several decades of growth.⁴³⁴²¹² The Updates also ~~considered~~purport to consider other growth scenarios, with higher water demands that still resulted in the Cal-Am water portfolio with the Pure Water Expansion providing sufficient water for several decades, as described below.

Additional considerations for projecting future demand: There are several additional planning considerations that the Updates claim support a conclusion that the Pure Water Expansion would provide water for a substantially higher number of years of growth in the area:

- **Continually lowering baseline:** As noted above, both the CPUC and the Updates considered a period of the past 10 years of usage data as a basis for average annual demand. The 2020 Update also identifies average demands based on the past five years and three years, both of which resulted in lower average demands of 9,825 ~~acre-feet~~acre-feet per year and 9,817 acre-feet per year, respectively, or about 10% less than the existing 10-year average. The Updates also include a graph showing the past 20 years of demand, which illustrates the substantial drop in water demand over that period and also illustrates that the early part of the most recent 10-year periods is much higher than current use – e.g., 2007 and 2008 have much higher demand than 2017 and 2018:

⁴³⁴²¹² The substantially higher “overage” that Cal-Am’s Project would supply might also raise concerns with conformity to Coastal Act Section 30254, which requires that new public works facilities be designed and limited to accommodate needs generated by development or uses consistent with other Coastal Act provisions.

(Modified)

Figure 1
Annual Water Production for Customer Service (Demand)
Last 20 Years
(Acre-Feet)



This graph also illustrates that calculating the 10-year average during the next several years will involve removing the higher demand years from 2008 to about 2015 and replacing them with lower demand years of 2019, 2020, and onward. As noted above, Cal-Am's recent testimony to the CPUC shows that it expects demand in 2020 through 2022 to remain at the low end of use – about 9,789 acre-feet per year – which results in the high demand during 2008 and 2009 of around 14,000 acre-feet being replaced by upcoming years of about 4,000 acre-feet less demand. Moving forward each year by deleting the earliest year of the 10-year period and adding a new year that includes the expected high estimate of 16.4 acre-feet per year of predicted growth (which, as noted in the Updates, is the highest rate over the past 20 years) results in the next several 10-year annual averages dropping well below the current 10-year average of 11,232 acre-feet per year – to a low of about 10,047 acre-feet in 2024.¹³²²¹³ It would then be expected to start increasing at the anticipated rate of growth. This approach puts the upcoming 10-year averages much closer to the existing five-year average used in the 2019 Update and allows for a relatively consistent comparison with the same approach used in the CPUC's reliance of the 10-year average. As described below, more recent use figures provided by Cal-Am show an even lower current baseline.

- **Rate of market absorption of water demand:** Although the Updates use a **five-**

¹³²²¹³ This approach results in the 10-year annual average roughly equaling:

In 2019 (2010 to 2019): 10,902

In 2020 (2011 to 2020): 10,661

In 2021 (2012 to 2021): 10,467

In 2022 (2013 to 2022): 10,280

In 2023 (2014 to 2023): 10,135

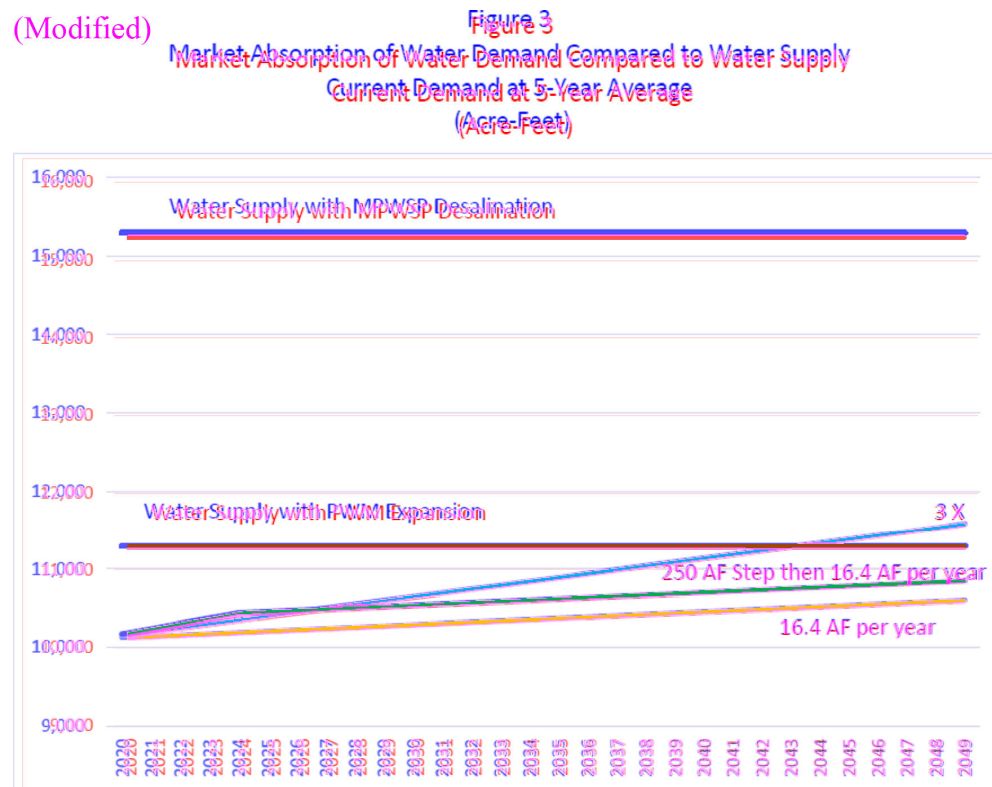
In 2024 (2015 to 2024): 10,047

In 2025 (2016 to 2025): 10,061

In 2026 (2017 to 2026): 10,102

In 2027 (2018 to 2027): 10,140

~~year~~~~five-~~ ~~year~~ average demand rather than the 10-year average demand used in the CPUC's review, it included ~~added~~ several potential growth scenarios to assess how the Pure Water Expansion would support expected growth into future decades. Using the current ~~five-year~~~~five-year~~ average annual demand as a baseline, it calculated future expected water demands in three ways: 1) adding the above-referenced 16.4 acre-feet per year growth rate; 2) adding three times that growth rate; and 3) adding an initial 250 acre-feet of growth during the first five years, followed by annual 16.4 acre-feet growth rates. As shown on the 2019 Update's Figure 3, those projections show that Cal-Am's available water portfolio with the Pure Water Expansion instead of the desalination facility would provide sufficient water under those growth rates until well beyond 2050, until about 2043, and again, well beyond 2050, respectively.



- Effects of cost on expected water demand:** Water use rates are also driven by considerations other than growth, including the cost of water. Reliance on either of these facilities – the Cal-Am project or the Pure Water Expansion – as part of ~~Cal-Am's~~~~Cal-~~~~Am's~~ water portfolio would result in increased water costs and water rates in ~~Cal-~~~~Am's~~~~Cal-Am's~~ service area. Current costs for water from the Carmel River and the Seaside Basin are in the range of several hundred dollars per acre-foot, ~~whereas water from the Cal-Am project is expected to cost about \$6,100 per acre-foot and water from the Pure Water Expansion about \$2,340 per acre-foot. Either would increase the average cost of water from Cal-Am's water portfolio, though the Cal-Am project, at about three times the cost of the Pure Water Expansion, would create a substantially larger cost increase (this issue is discussed in more detail in Section II.N – Environmental Justice and Section II.P – Coastal-Dependent Industrial Facility Override). Additionally, because the Cal-Am project would be built to produce significantly more water than will be needed for a number of years, its~~

actual costs per acre-foot would be substantially higher than \$6,100 for as long as the facility was operated at less than its design capacity. This is because its fixed costs, such as the capital costs for building the facility, would be spread among the smaller number of acre-feet actually produced. The Updates illustrate this difference, as shown in Table 8 below, which identify the expected cost per acre-foot at three different levels of production:

As discussed above, the CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single family residence for desalination facility costs and financing, and that increase is not directly tied to per acre-foot water costs.²¹⁴ Whereas water from the Pure Water Expansion is currently projected to be somewhere in the range of \$2,508 to \$3,678 per acre-foot – at minimum, more than 50% above the rate of \$1,720 per acre-foot approved by the CPUC. Either water supply project would increase the average cost of water from Cal-Am’s water portfolio, though the expected costs of Cal-Am’s proposed Project would be higher than those of the Pure Water Expansion. At current expected costs, ratepayers would pay more per acre-foot for Cal-Am’s water than Pure Water Expansion. However, current costs projections for Pure Water Expansion do not account for costs already expended on the Cal-Am desalination facility, which is currently approximately \$110 million, and it is reasonably foreseeable that such costs would be recovered via water rate increases in connection with the Pure Water Expansion. Further, as discussed in more detail in Section IV.N, *supra*, and as the CPUC recognized in its final decision to approve the Cal-Am Project’s Final EIR/EIS, the relatively high cost of desalinated water must be balanced against the need to achieve a sufficient supply of reliable potable water for the Peninsula. Because there are no feasible alternatives to the proposed Project, it remains the best option to ensure water reliability. Moreover, with implementation of Special Condition 13, which will increase the discount offered from Cal-Am’s Customer Assistance program and improve efforts to enroll eligible customers, costs to residents newly enrolled in the Customer Assistance program could see their rates drop rather than increase after the Project begins operations.

Table 8: Cal-Am costs per acre-foot at different production levels

Annual production by desalination facility (in acre-feet):	6,252	5,000	4,300
Annual fixed costs (in millions):	\$30.3	\$30.3	\$30.3
Annual variable costs (in millions):	\$7.8	\$6.2	\$5.4
Total annual costs to customers (in millions):	\$38.1	\$36.5	\$35.7
Resulting cost per acre-foot	\$6,094	\$7,308	\$8,294

As in past instances, if actual costs are higher than initially determined by the CPUC, Cal-Am would presumably seek to recover those costs through a CPUC-approved rate increase or surcharge.

²¹⁴ See August 13, 2020 Latham Letter to Commission, p. 1, Exhibit 1, p. 3 n.4 (citing Attachment C-1 to Advice Letter No. 1220-A from California-American Water Company to CPUC).

- Lower per capita use due to conservation:** The Updates also describe the effects of recent legislation that establishes urban water efficiency standards to be implemented by water agencies.¹³³²¹⁵ The legislation establishes standards for indoor and outdoor water use, allowable limits for water lost to leaks, and other measures meant to reduce per capita water use in the state. It establishes, for example, an indoor water use rate of 55 gallons per person per day that will be further reduced to 50 gallons per person per day in the coming years. The Updates note that per capita use in the Cal-Am service area is currently at 57 gallons per person per day, so meeting the new mandates will result in a relatively small reduction of about five percent per capita, which will likely lead to a moderate reduction in the future growth rates described above and will allow the water supplies provided by either project to last somewhat further into the future.
- Effects of COVID-19 restrictions:** It is difficult to quantify the short- or longer-term effects of the COVID-19 pandemic on expected rates of water use. Cal-Am's service area has been heavily dependent on tourism and associated hotel, restaurant, and visitor-serving uses, but the water uses by those industries have been significantly curtailed due to pandemic-related travel restrictions and ~~shelter-in-place~~shelter-in-place requirements. With area residents sheltering in place, it is likely that residential water use has increased, but not sufficiently to match the missing demand of the above-referenced industries. ~~At the very least, it appears~~However, it is speculative to assume that COVID-19 will result in a slower and longer recovery or "bounce-back" period. ~~With the current lower baseline use and with 700 acre-feet per year of water available through ASR storage, Cal-Am will likely be able to meet its CDO obligations without having either project online by the December 2021 CDO deadline.~~

To provide a short-term comparison, the chart below compares Cal-Am's ~~pre-COVID~~pre-COVID-19 total water production in March, April, May, and June of 2019 with its water demand during those same months in 2020 and shows an approximately 10% decrease in water use:

Month:	2019:	2020:	Reduction from 2019 to 2020:
March	1029.29	851.88	-177.41 (-17.2%)
April	1021.33	931.86	-89.47 (-8.8%)
May	917.91	843.90	-74.01 (-8.1%)
June	866.82	844.71	-22.11 (-2.6%)
Totals:	3835.35	3472.35	-363.00 (-9.5)

Note: all figures in acre-feet, and are obtained from Cal-Am's quarterly reports to the State Water Resources Control Board required by Cease-and-Desist Order 2016-0016, available at:

~~<https://amwater.com/caaw/customer-service-billing/billing-payment-info/water-rates/monterey-district>~~
<https://amwater.com/caaw/customer-service-billing/billing-payment-info/water-rates/monterey-district>

~~In sum, with the current 10-year annual average demand being lower than the demand identified in Cal-Am's Final EIR/EIS, with any of several potential future growth rates, and with increased water costs and increased conservation mandates, adding the Pure Water~~

¹³³²¹⁵ The 2019 Update referenced both the 2018 adoption of SB 606 and AB 1668.

~~Expansion to Cal-Am's water supply portfolio instead of the desalination facility, is expected to provide sufficient water for at least the next two or more decades.~~

~~Two additional factors support this conclusion. First, and as noted above, the Updates include a category of "other available supplies" that would provide an additional 406 acre-feet per year to the above totals. These include:~~

- ~~☐ Up to about 300 acre-feet per year from the Carmel River (through State Water Board Permit #21330 issued to Cal-Am in 2013).~~
- ~~☐ Additional production from the Sand City desalination facility: up to about 106 acre-feet per year available to Cal-Am until Sand City generates sufficient growth and development to use this volume of water. At the time of the CPUC's review, this additional production had been suggested, but the CPUC found that it was not supported by credible evidence. More recently, however, Cal-Am's has reported as part of its compliance requirements to the State Water Board that it used 189.55 acre-feet from the Sand City facility during the most recent water year, about 80% more than had been anticipated in the CPUC's review.~~
- ~~☐ "Carryover Credit" from the Seaside Groundwater Basin: Cal-Am has a number of "credits" for water in the Seaside Groundwater Basin that Cal-Am was allowed to produce, but did not produce due to constraints within the delivery system. The Basin currently has about 1,400 acre-feet in storage.~~

~~While these supplies are not as certain or may not be as consistently reliable as other supplies in Cal-Am's water portfolio, some proportion of these 406 acre-feet is likely to be available as part of future supply portfolios.~~

Maximum daily and peak hour demands: As noted above, Cal-Am's CEQA review evaluated whether the desalination facility, if included as part of Cal-Am's water portfolio, would allow Cal-Am's water system to provide maximum daily demand ("MDD") and peak hour demand ("PHD"), pursuant to the state's requirements for public water systems. That review considered Cal-Am's peak month demand as being ~~the critical~~[thecritical](#) determinant as to whether the system could meet MDD and PHD. The review used July of 2010 as the peak month demand, when Cal-Am's ratepayers used 1,111 acre-feet of water. The CPUC's Final Decision noted, based on the information available at that time, that the MDD was 60.48 acre-feet (about 19.7 million gallons) and the PHD was 15.12 acre-feet (about 4.9 million gallons).

MPWMD has also prepared calculations to determine whether including the Pure Water Expansion instead of the desalination facility as part of the water portfolio could meet maximum daily and peak hour demands (see Exhibit ~~17~~[19](#) – MPWMD *Analysis of Available Well Capacity for 10-Year Maximum Daily Demand (MDD) and Peak Hour Demand (PHD)*). It used an even higher peak month as its baseline – July of 2012, when demand was 1,206 acre-feet – and determined that the Pure Water Expansion would more than allow Cal-Am to meet these standards. ~~The District's~~[MPWMD's](#) calculations included assumptions that the additional well capacity included as part of the Pure Water Expansion and a proposed pump station would be developed as proposed and one or more existing wells not currently connected to the system could be added. It concluded that these demands could be met under any of several operating scenarios that used the Pure Water Expansion instead of the desalination facility. Cal-Am's June 30, 2020 letter stated that the Pure Water Expansion would not be sufficient to support these peak demand needs; ~~however, it neglected to address other factors that were~~

~~addressed in another recent study, as described below.¹³⁴ Cal-Am explained that using only MDD and PHD to project demand is inappropriate because public water systems must be able to “deliver water supplies at near MDD levels during dry years over a few maximum months of demands.” The appropriate way to ensure adequate capacity is by calculating demand based on maximum month demand (“MMD”) as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)). Cal-Am explained that MPWMD’s conclusion that the Pure Water Expansion can meet MDD and PHD relies on the availability of drought reserves to meet such demand—however, MPWMD also assumes that no drought conditions will occur on the Monterey Peninsula between now and 2034, allowing for the buildup of such reserves. As explained below, the assumption that the Peninsula will not experience drought conditions over any significant period is wholly untenable, given that California has experienced a drought in every decade over the last century,²¹⁶ and recharge of groundwater reserves is essentially unavailable under drought conditions.²¹⁷~~

~~Drought supply: A key concern raised by Cal-Am and others about the Pure Water Expansion is whether it would be able to provide sufficient water supply during multiple years of drought. The Project Final EIR/EIS described concerns about whether even the first phase of the Pure Water project would provide sufficient water during multiple drought years, and it based the approved size and volume of the desalination facility, in part, with this concern in mind.¹³⁵ MPWMD has evaluated how much water would be available during multiple drought years and determined that, with the Pure Water Expansion adding water to the ASR project each year and with the current level of demand and expected increases in that demand, Cal-Am’s portfolio could provide adequate water for multiple drought years (see Exhibit 18 – Final Supplemental Environmental Impact Report for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, April 2020, Appendix M: Source Water Operational Plan Technical Memorandum). MPWMD’s modeling shows that the amount of water stored in the ASR would increase at a rate allowing it to contribute water to Cal-Am’s water supply portfolio during an increasing number of drought years through time. Starting in 2020, the ASR would provide between about 4,750 and 5,950 acre-feet per year and by 2024 would have enough water stored to provide for about two years of drought~~

¹³⁴ In an April 17, 2020 call with staff of the State Water Board’s Drinking Water Division and MPWMD to discuss MPWMD’s analysis, Board staff identified no inconsistencies with state drinking water requirements.

²¹⁶ See U.S. Geological Survey, 2012-2016 California Drought: Historical Perspective, available at [https://water.ca.gov/-/media/DWR-Website/Web-Pages/What-We-Do/Drought-Mitigation/Files/Publications-And-Reports/a6022_CalSigDroughts19_v9_ay11.pdf](https://ca.water.usgs.gov/california-drought/california-drought-comparisons.html#:~:text=Runoff%20and%20precipitation%20conditions%20for%20California's%20six%20historical%20droughts; California Department of Water Resources, California’s Most Significant Droughts: Comparing Historical and Recent Conditions, p. 54 (January 2020), available at <a href=).

²¹⁷ In an April 17, 2020 call with staff of the State Water Board’s Drinking Water Division and MPWMD to discuss MPWMD’s analysis, Board staff identified no inconsistencies with state drinking water requirements.

¹³⁵ See, for example, the Final EIR/EIS Section 8.2.13 at pages 117-18, which states: [t]he recent severe, five-year drought demonstrated that it is not reasonable to assume that there would never be drought conditions that could deplete ASR reserves and prevent new ASR supplies being diverted from the Carmel River for storage and use. Consequently, changes in plant sizing based on scenarios that assume the availability of adequate ASR supplies would need to be considered carefully.

~~and by 2034 would have enough stored for at least four years of drought and possibly longer.~~

Other reviews: In response to the November 2019 Commission staff report on the ~~Cal-Am~~Cal-Am project and to the 2019 Update, Cal-Am prepared a review and critique of the conclusions of those documents. However, that review (see Exhibit ~~19~~21 – California American Water Peer Review of Supply and Demand for Water on the Monterey Peninsula, Hazen and Sawyer, January 22, 2020) assumed for its analyses that ~~Cal-Am's~~Cal-Am's current demand was 12,350 acre-feet per year, which was substantially greater than the above-referenced 9,789 acre-feet that ~~Cal-Am~~Cal-Am has recently acknowledged to be its expected demand in 2019 through 2022.

In addition to the analyses conducted by the CPUC, Cal-Am, and MPWMD, ~~the Marina Coast Water District ("MCWD")~~— conducted its own analyses to identify whether the Pure Water Expansion would provide adequate future water supplies. ~~The~~ MCWD's report (see Exhibit ~~20~~22 – Expert Report and Recommendations of Peter Mayer, P.E., Regarding Water Supply and Demand in the California American Water Company's Monterey Main System, April 21, 2020) used an even higher, and therefore more conservative, demand figure than both the MPWMD and Cal-Am had used (9,885 ~~acre-feet~~acre-feet versus 9,825 and 9,789 acre-feet, respectively), but similarly concluded that the Pure Water Expansion would meet water needs and state requirements until at least 2040. ~~These reports also countered the other conclusions of the above-referenced Hazen and Sawyer report – for example, they point out that the Hazen and Sawyer report made errors in its peak demand analyses and assumed that per capita water use would increase despite state requirements to reduce that use.~~¹³⁶

The Mayer report includes additional assessments of expected growth, using population projections provided by the Association of Monterey Bay Area Governments ("AMBAG") and based on expected water usage in the various water demand sectors – e.g., residential, commercial. It evaluated expected water use using both the current demands and using the expected reductions in demand that would occur during ongoing implementation of water efficiency measures. Under both scenarios, it determined that either project would allow Cal-Am to have sufficient water supplies through 2040 and that adding the Pure Water Expansion to Cal-Am's water supply portfolio would provide an approximately 1,200-acre-foot surplus supply in 2040. It also provides an evaluation of how the Pure Water Expansion would allow Cal-Am to meet expected peak demand requirements under any of several scenarios and shows that ~~Cal-Am~~Cal-Am has additional water management options – such as adding additional pumping capacity, implementing rate or demand control measures, etc. – that would provide even more ability, if needed to meet those peak demands.

Demand Determinations

The Commission has been presented with conflicting ranges of estimates and projections of current and future water demand for the Peninsula. The MPWMD range of future demand is 10,855 acre-feet per year to 12,287 acre-feet per year.²¹⁸ Demand

¹³⁶ ~~See also the March 6, 2020 letter from the Monterey Peninsula Water Management District to Cal-Am, which raises similar concerns about the Hazen and Sawyer report.~~

²¹⁸ Compare Update 2019 Table 8 with Update 2020 Table 9. In the 2019 Update, MPWMD estimated the higher end of demand to be 12,656 acre-feet per year but revised its estimate to 12,287 acre-feet in the 2020 Update.

projections from MCWD are generally within this same range. In response to the analysis provided to the Commission by MPWMD and MCWD, on August 12, 2020, Cal-Am submitted an expert report prepared by Hazen and Sawyer, which demonstrates that the Pure Water Expansion is not capable of meeting even the most conservative end of the range of demand estimates when combined with Cal-Am's existing portfolio without the desalination Project.²¹⁹ A supplemental report from Hazen and Sawyer, dated September 10, 2020, and attached hereto as Exhibit 23, confirms this assessment. Therefore, without deciding on the merits of the various demand projections presented to the Commission, for purposes of determining whether the Pure Water Expansion could provide sufficient supply to meet the Peninsula's water demand, the Commission is assuming that demand for Cal-Am's Monterey service area is 10,855 acre-feet per year (although MPWMD has acknowledged that demand may be as high as 12,287 acre-feet per year).²²⁰

Evaluation of Available Supplies to Meet Demand

To determine if the Pure Water Expansion is a feasible alternative to the Project, it must be determined whether available water supplies within Cal-Am's service territory can meet 10,855 acre-feet per year of demand with only the addition of the Pure Water Expansion.

The CPUC analysis showed that Cal-Am's water portfolio, including production from the proposed desalination facility, would provide about roughly 1,300 acre-feet more water than needed to serve the CPUC expected 14,000 acre-feet per year demand. The components of the expected water portfolio are shown in Table 5 and described below.

Table 5: CPUC identified available water supplies

<u>Source:</u>	<u>Amount Available (in acre-feet per year):</u>
<u>Carmel River</u>	<u>3,376</u>
<u>Seaside Groundwater Basin</u>	<u>774</u>
<u>Aquifer Storage and Recovery</u>	<u>1,300</u>
<u>Sand City Desalination Facility</u>	<u>94</u>
<u>Pure Water Monterey Groundwater Replenishment Project</u>	<u>3,500</u>
<u>Total:</u>	<u>9,044</u>
<u>Total when including a 6.4 mgd (6,252 afy) desalination facility:</u>	<u>15,296</u>

²¹⁹ See Exhibit 25 – August 11, 2020 Hazen Memo.

²²⁰ Since the Commission adopts the most restrictive estimate of demand for purposes of evaluating the feasibility of the Pure Water Expansion, the Commission does not need to evaluate arguments from MCWD, Stoldt, and Marina concerning the effectiveness of future conservation measures, the effects of increased customer rates on demand, expected demand from the buildout of the Pebble Beach entitlements and lots of records, hospitality industry rebound/tourism bounce-back or other similar arguments that demand will be further depressed.

A common principle in water planning is that having more water sources is preferred to having fewer, as more sources generally allow for more overall reliability. Although some areas in the state rely on one or two main sources (along with conservation) to meet their water needs. However, the Peninsula is unique and does not have a significant local water supply source of its own. As shown above, Cal-Am currently has five sources (not counting conservation). Adding the Pure Water Expansion and including it as part of the existing Pure Water project would keep Cal-Am with five sources, while adding desalination would increase sources to six.

In summary, the CPUC identified a current baseline use of 12,000 acre-feet per year, an expected future demand of about 14,000 acre-feet per year, and an available supply, including Cal-Am's proposed desalination facility, of 15,296 acre-feet per year.

Similar to the competing demand scenarios described previously, the Commission received competing analyses purporting to identify the available water supplies for the Peninsula within Cal-Am's water supply portfolio. Table 7 below summarizes the conflicting evaluations of available supplies.

Table 7: Identified Available Water Supplies In Acre-Feet Per Year

(Added)/ Assumption Scenario	Proposed by Others			ASR Controlled*			Wastewater & Reclamation Ditch Controlled*		
	CPUC	MPWMD 2020	MPWMD 2019	No ASR	Half ASR (650 AFY)	Full ASR (1,300 AFY)	Updated Table 9 – Normal Year building Reserve	Updated Table 10 – Normal Yr after full Reserve	Updated Table 11 – Dry Year
1. Carmel River	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376
2. Seaside Groundwater Basin	774	774	774	774	774	774	774	774	774
3. Aquifer Storage and Recovery	1,300	1,300	1,300	0	650	1,300	1,300	1,300	1,300
4. Sand City Desalination Facility	94	94	94	94	94	94	94	94	94
5. Pure Water Project	3,500	3,500	3,500	3,500	3,500	3,500	3,700	3,500	0
6. Pure Water Expansion	-	2,250	2,250	2,250	2,250	2,250	528	719	0
7. Other Available Supplies	-	300	406	-	-	-	-	-	-
Total without desalination Project	9,044	11,594	11,700	9,994	10,644	11,294	9,772	9,763	5,544
Surplus/Deficit assuming 10,855 afy demand	-1,811	739	845	-861	-211	439	-1083	-1,092	-5,311

* Figure 2 from the August 11, 2020 Hazen and Sawyer report depicts these alternative scenarios. (August 11, 2020 Hazen Memo, p. 19.)

The availability of the water supply sources included in Table 7 above are described in more detail below.

Source 1. Carmel River.

Although Cal-Am is required to reduce its withdrawals from the Carmel River, it continues to have the legal right to withdraw 3,376 acre-feet per year from the river.

Source 2. Seaside Groundwater Basin.

Cal-Am has also relied on past withdrawals from the Seaside Groundwater Basin. As part of the Basin's adjudication in 2006, Cal-Am was determined to have rights to 1,474 acre-feet per year from the Basin; however, based on its overwithdrawals from past years, Cal-Am is required to replenish the Basin at a rate of 700 acre-feet per year over a 25-year period, which limits its allowable withdrawals to 774 acre-feet per year. In an August 12, 2020 memorandum, the Seaside Groundwater Basin Watermaster expressed concern that the Basin would need additional water – about 1,000 acre-feet per year over and above the currently proposed 700 acre-feet per year – to provide protective groundwater elevations in the Basin, and that the proposed Project is the only possible source for this additional supply. For the sake of this alternatives analysis of the Pure Water Expansion, the Commission is utilizing the most conservative demand levels presented to it (10,855 acre-feet per year) without considering the potential need for an additional 1,000 acre-feet per year for the Seaside Basin. The Commission notes, however, that based on the submission from the Seaside Groundwater Basin Watermaster, future demand on the Peninsula could increase by 1,000 acre-feet per year to account for the additional water needed to prevent groundwater intrusion in the Basin.

Source 3. Aquifer Storage and Recovery ("ASR").

Cal-Am and MPWMD together implemented an ASR project that provides a water supply based on using available storage capacity in the Seaside Basin. The project involves diverting high winter flows of Carmel River water into the Basin for later recovery, treatment, and delivery to customers during summer months to help reduce summer withdrawals from the river. The winter flows it diverts are only those identified as excess to the flows needed to support the river's threatened steelhead population. MPWMD's website explains that the first ASR phase was completed in 2008 and allows a maximum annual diversion of about 2,400 acre-feet per year from the Carmel River, and has an average yield of approximately 920 acre-feet per year. The second phase, completed in 2013, allows storage of up to 2,900 acre-feet per year and provides an average yield of 1,050 acre-feet of additional water supply.²²¹ However, MPWMD explains in the Updates that "[b]ased on long-term historical precipitation and streamflow data, ASR is designed to produce 1,920 AFA on average."

The analyses in the Updates rely on ASR providing 1,300 acre-feet every year for Pure Water Expansion to meet existing Peninsula water demand and assumes no drought between now and 2034. These assumptions are unrealistic for the following reasons. First, as explained in the August 11, 2020 report from Hazen and Sawyer, ASR using excess Carmel River water in the past 15 years has not shown the ability to consistently

²²¹ See <https://www.mpwmd.net/water-supply/aquifer-storage-recovery/>

provide 1,300 acre-feet in any given year, much less in drought years. Between 2005 and 2019, annual ASR reinjection only reached 1,300 acre-feet twice.²²² During that same period, ASR only achieved an output of the 1,300 acre-feet assumed by the Updates once. Second, during drought periods, injection and recovery from ASR is essentially unavailable. In a single dry year, ASR water availability is reduced to 63%. Following three dry years, ASR availability is reduced to 4%.²²³ The reliability of ASR during drought conditions is depicted in Cal-Am's Urban Water Management Plan Table 6-2, as shown below.

(Added)

Table 6-2: Monterey County District Supply Reliability-Current Water Use

Water Supply Sources ¹	Average / Normal Water Year Supply	Single Dry Water Year	Multiple Dry Water Year Supply		
			Year 1	Year 2	Year 3
Carmel Valley Aquifer	100%	100%	100%	100%	100%
Seaside Groundwater Basin	100%	100%	100%	100%	100%
Salinas Valley Groundwater Basin	100%	100%	100%	100%	100%
Aquifer Storage and Recovery	100%	63%	74%	17%	4%
Sand City Desalination	100%	100%	100%	100%	100%

Third, ASR has not proven itself capable of building up a drought reserve to consistently deliver 1,300 acre-feet. For the last 15 years, average annual storage of ASR is approximately 138 acre-feet per year. Over the last five years, average annual storage of ASR is 352 acre-feet per year.²²⁴ These amounts are not sufficient storage to provide 1,300 acre-feet annually over a multi-year drought. As a result, the Commission cannot rely on the availability of 1,300 acre-feet per year from ASR as part of the water supply portfolio.

In Table 7, three ASR Controlled scenarios are presented: No ASR, Half ASR (650 acre-feet per year), and Full ASR (1,300 acre-feet per year). The Half ASR scenario involves more generous assumptions of ASR availability than the ASR average of 450 acre-feet per year during the past 22 years. Under these three scenarios, water supply for all other sources is assumed to be equal to the availability assumed by the Updates and by the CPUC – i.e., only availability of ASR is variable. As shown, ASR must provide 1,300 acre-feet per year every year in order to achieve the low end demand of 10,855 acre-feet per year. Under the Half ASR scenario, this demand cannot be met.

When a multi-year drought is considered, the availability of ASR is reduced to zero. The Updates assume that ASR water supply is available each year, such that the Peninsula can build up a reserve of ASR water to compensate for extended drought conditions, and that no drought will occur between now and 2034. In assuming that no drought will occur, the Updates also ignore the fact that ASR recharge is unreliable and takes place

²²² Exhibit 25 – August 11, 2020 Hazen Memo, pp. 5, 19.

²²³ Exhibit 21 – January 23, 2020 Hazen Memo, pp. 6-8; Exhibit 25 – August 11, 2020, Hazen Memo, pp. 5.

²²⁴ Exhibit 25 – August 11, 2020 Hazen Memo, p. 5.

intermittently, at best. California has experienced a multi-year dry period or drought in every decade for the last century, and recharge of groundwater reserves is essentially unavailable under drought conditions. Therefore, it is inappropriate not to consider the effects of drought when analyzing the availability of ASR water. ASR water availability is reduced to 63% in a single dry year, and even further reduced to 4% following three dry years.²²⁵ Accordingly, when considering availability of ASR alone, the Pure Water Expansion cannot meet even the low demand projection of 10,855 acre-feet per year. As discussed below, when drought is factored in while also considering the availability of wastewater and Reclamation Ditch flows, the Peninsula's water supply deficit could reach upwards of 5,311 acre-feet.

Source 4. Sand City Desalination Facility.

This facility is owned by Sand City but operated by Cal-Am. Of the facility's 300 acre-feet per year capacity, Cal-Am has available to it a long-term supply of 94 acre-feet per year.

Source 5 and 6. Pure Water Project and Pure Water Expansion.

At the time of the CPUC's review, the first phase of Cal-Am's Project – a joint proposal by the Monterey Regional Water Pollution Control Agency and MPWMD – had just undergone environmental review. The project involves treating several water sources – including treated wastewater, agricultural runoff water, and stormwater – and injecting the treated water into the Seaside Groundwater Basin for later additional treatment and use as a potable water supply. The CPUC's decision to approve Cal-Am's desalination facility relied on Cal-Am being able to purchase 3,500 acre-feet per year from the Pure Water project, which allowed the CPUC to reduce the size of Cal-Am's desalination facility from its initially proposed 10,700 acre-feet per year to its currently proposed 6,252 acre-feet per year (i.e., from 9.6 to 6.4 mgd). As discussed in the feasibility analysis above, due to technical issues, the Pure Water project is currently only capable of producing 2,030 acre-feet per year, which is less than 58 percent of the 3,500 acre-feet per year the project was intended to produce. The Pure Water Expansion is intended to expand the Pure Water project with the goal of supplying 2,250 acre-feet per year in addition to the 3,500 acre-feet per year to be supplied by the Pure Water project. In order to achieve the low-end demand of 10,855 acre-feet per year, MPWMD has assumed that 100% of the projected supplies from both the Pure Water project and the Pure Water Expansion will be available at all times.

Speculative Source Water Supplies for the Pure Water Project and Expansion. As described above in the discussion of Pure Water Expansion feasibility, there is significant uncertainty and controversy surrounding the availability and reliability of the source waters for the Pure Water project and the Pure Water Expansion. (See Section IV.O.1, *supra*.) Many of the water sources purportedly available to Monterey One Water to supply the Pure Water project and the Pure Water Expansion are either contractually dedicated to other users or are merely "paper" water, meaning these sources are not actually available when Monterey One Water needs them most, such as during the summer or during drought. Relying on such speculative water sources to supply the Pure Water Expansion will result in inadequate supplies for the Peninsula.

²²⁵ Exhibit 21 – January 23, 2020 Hazen Memo, pp. 6-8.

It is unnecessary to make any conclusions regarding the contractual disputes between Monterey One Water and other public agencies (such as Monterey One Water's dispute with MCWRA over the ARWRA source waters and Monterey One Water's dispute with the City of Salinas regarding use of the City's agricultural produce wash water). Instead, the limited and variable availability of WWTP flows and surface water flows from the Reclamation Ditch indicate that the Pure Water project and the Pure Water Expansion will not be able to produce their assumed supply of 3,500 acre-feet per year and 2,250 acre-feet per year, respectively.

- WWTP Flows. There are significant limitations on wastewater flows, and data gaps within the analyses in the SEIR for the Expansion and offered by the Updates that do not account for the continuing decrease in WWTP flows in the region over the past decade. Specifically, the SEIR and subsequent analysis provided by the Updates and MCWD do not account for WWTP flows beyond 2013. In response to the August 11, 2020 Hazen and Sawyer memo demonstrating that WWTP flows declined significantly since 2013, Monterey One Water made updated WWTP flow information available to the Commission and the public for the first time on August 20, 2020. In Hazen and Sawyer's August 23 and September 10, 2020 supplemental reports, Hazen demonstrates that based on the new WWTP flow information provided by Monterey One Water, the Pure Water project and the Pure Water Expansion cannot reasonably rely on WWTP flows to produce 3,500 acre-feet per year and 2,250 acre-feet per year, respectively. Similarly, there is a continuing decline of wastewater effluent directed to the ocean outfall. The Draft SEIR indicated that there was approximately 8,000 acre-feet per year of wastewater effluent available to the ocean outfall in a normal year. (Draft SEIR Appendix M, Table 2.) However, the Final SEIR updated this assumption to 5,811 acre-feet per year. When considering Monterey One Water's flow information for 2020, which shows wastewater flow at 17,980 acre-feet, the available wastewater flow to the ocean outfall is 5,554 acre-feet.²²⁶ Given that the Pure Water project requires 4,568 acre-feet-per-year of wastewater to produce 3,700 acre-feet-per-year in product water for Cal-Am and to build a drought reserve, and the Regional Urban Water Augmentation Project requires at least 741 acre-feet-per-year, only 432 acre-feet-per-year in WWTP flows will be available for the Pure Water Expansion.²²⁷ Given that the Pure Water Expansion requires at least 2,778 acre-feet-per-year to produce the promised 2,250 acre-feet-per-year in treated water, available WWTP source waters are insufficient to allow the Expansion to operate near its capacity. Actual WWTP flows are likely to be even less in dry years, during which there will be no flow available for the Pure Water Expansion. When data and wastewater trends are taken into account, the Pure Water project and the Pure Water Expansion would not have sufficient source water to provide the Peninsula with an adequate water supply during substantial periods during the year in both normal and dry years.²²⁸
- Reclamation Ditch Flows. As explained above, the Pure Water projects depend heavily on surface water flows. Among the surface water flows relied upon for the Pure Water projects is flow from the Reclamation Ditch. Reclamation Ditch flows were analyzed originally in the Schaaf & Wheeler Agricultural Ditch Yield Study,

²²⁶ Exhibit 23 – September 10, 2020 Hazen Memo, p. 2.

²²⁷ Id.

²²⁸ Exhibit 25 – August 11, 2020 Hazen Memo, pp. 6-10.

March 2015, based on 2006-2014 data, and were updated in the Pure Water Expansion SEIR Appendix I Tables 8-11. Hazen and Sawyer's August 11, 2020 report updated Reclamation Ditch flows using actual recorded flow data from U.S. Geological Survey ("USGS").²²⁹ Notably, the USGS data provides recorded Reclamation Ditch flow by month from 2010 to April 2020. Based on a review of actual flow records from USGS, the SEIR for the Pure Water Expansion significantly overestimated the availability of Reclamation Ditch flow by 16 to 67 percent in critical summer months.

- Monterey One Water has claimed that it has secured agreements for more than adequate source waters to supply the Pure Water Expansion. However, Tables 2 and 3 to the Pure Water Expansion SEIR, coupled with the above-described analysis of WWTP flows, demonstrates that sufficient source waters are not in fact available. When accounting for all assumed and estimated source water flows according to the Source Water Priority Table 3 in Appendix M to the Pure Water Expansion SEIR, there is only 2,297 acre-feet-per-year available to the Pure Water Expansion.²³⁰ With such flows available, the maximum treated water that could be produced by the Pure Water Expansion amounts to 1,860 acre-feet-per-year. That supply is further reduced to 1,597 acre-feet-per-year if source water figures are reduced to account for current wastewater flows described above. These supplies are far below the 2,250 acre-feet-per-year that Monterey One Water claims could be supplied by the Pure Water Expansion, and would not provide adequate supplies to meet demand in Cal-Am's Monterey service area.

In Table 7, under the Wastewater & Reclamation Ditch Scenarios, the source water data in the FSEIR has been updated to account for the availability of WWTP flows and Reclamation Ditch flows. Under these three scenarios, all other sources, including ASR, are assumed to be fully available. As depicted in the Wastewater & Reclamation Ditch Scenarios in Table 7, the operation of the Pure Water project and the Pure Water Expansion, when combined with Cal-Am's existing sources, cannot satisfy MPWMD's low-end demand estimate of 10,855 acre-feet per year. In normal years the supply deficit could range from -1,083 acre-feet to -1,092 acre-feet, while in a dry year that deficit could reach -5,311 acre-feet. If the full availability of ASR were replaced in the table with realistic ASR assumptions for the Wastewater & Reclamation Ditch Scenarios, then the supply deficit would be even more severe.

Source 7. Other Available Supplies.

The Updates also assert that the following "Other Available Sources" are available to Cal-Am:

- Up to about 300 acre-feet per year from the Carmel River ("Table 13" water rights through State Water Board Permit #21330 issued to Cal-Am in 2013). Cal-Am's

²²⁹ Exhibit 25 – August 11, 2020 Hazen Memo, pp. 10-11; see also September 10, 2020 Pebble Beach Company Letter to Coastal Commission p.2 (From 30 years of experience with the Pebble Beach water reclamation project "we've learned that the supply of recycled water is extremely dependent upon the community's potable water use that, in turn, supplies the 'raw product' for the reclamation process... Recycled water alone simply cannot meet the Monterey Peninsula's water supply needs on a sustainable, long-term basis.")

²³⁰ See Exhibit 23 – September 10, 2020 Hazen Memo, p. 2.

Table 13 water rights under Permit 21330 provide a potential right to divert up to 1,488 acre-feet per year from the Carmel River, but this right is only available between December and May and is subject to instream flow requirements, such that in times of drought Table 13 water may not be available. Use of Table 13 water is also limited to the Carmel River watershed. The Updates acknowledges these limitations, but assumes that 300 acre-feet per year will be available, despite the fact that diversions were only 42.2 acre-feet in 2015 and 164.2 acre-feet in 2016. A water system's supply must be assessed in dry and multiple dry water years, and must include the source's lowest anticipated daily yield.²³¹ Because of the uncertainty of availability of Table 13, inclusion of any permitted amounts from this source in determining adequacy of supplies is speculative and not supported.

- Additional production from the Sand City desalination facility: up to about 106 acre-feet per year available to Cal-Am until Sand City generates sufficient growth and development to use this volume of water. The CPUC considered whether any additional supply was available from the Sand City desalination plant, and specifically whether an additional 106 acre-feet per year was available to Cal-Am. The CPUC concluded that arguments about any additional allocation above the 94 acre-feet per year already allocated to Cal-Am confused the Sand City plant's total expected production of 200 acre-feet-per-year with Cal-Am's allocation, and that no credible evidence supported the claim that Cal-Am would be able to rely on receiving more than the 94 acre-feet-per-year to which it is currently entitled.²³² More recently, Cal-Am has reported as part of its compliance requirements to the State Water Board that the Sand City facility had produced a total of 153.95 acre-feet during the 2018-2019 recent water year, although Cal-Am's existing agreements continue to permit it to utilize only 94 acre-feet-per-year of the production from the Sand City facility.²³³ As such, reliance on this water source in an amount greater than 94 acre-feet-per-year is speculative.
- "Carryover Credit" from the Seaside Groundwater Basin: Cal-Am has a number of "credits" for water in the Seaside Groundwater Basin that Cal-Am was allowed to produce, but did not produce due to constraints within the delivery system. The Updates assert that the Basin currently has about 1,400 acre-feet in storage. However, this position conflicts with the CPUC's determination that only 774 afy is available from the Seaside Basin: "Cal-Am's has an adjudicated right to 1,474 afy from the Seaside Groundwater Basin. See, *Cal-Am v. City of Seaside et al.*, Super. Ct. Monterey County, 2006, No. M66343. However, Cal-Am must also repay the Seaside Basin for overdrafts and has therefore assumed a reduction of supply of 700 afy over 25 years, resulting in a net supply available to Cal-Am of 774 afy from the Seaside Groundwater Basin."²³⁴ Further, the Seaside Watermaster has provided the Commission with evidence that up to an additional 1,000 acre-feet per year may need to be injected into the Seaside Basin to prevent seawater intrusion. If the Seaside Basin were to become seawater intruded, then Cal-Am

²³¹ See Water Code, § 10635(a); Cal. Code Regs., tit. 22, § 64554(k).

²³² October 15, 2019, Ian Crooks, Cal-Am Letter to MPWMD, pp. 2, 11.

²³³ See July 29, 2020 Cal-Am 4th Quarterly Report to State Water Board for the 2018-2019 Water Year, p. 2.

²³⁴ Decision 18-09-017, p. 33.

and others (including Monterey One Water) may not be able to pump water from the Basin.

While these supplies are not as certain or may not be as consistently reliable as other supplies in Cal-Am's water portfolio, some proportion of these 406 acre-feet is likely to be available at certain times as part of future supply portfolios. To ensure a more conservative assessment of available supplies, the "Other Available Supply" category above is considered a speculative supply and not certain to be available to Cal-Am, as that category includes some less certain water sources.

Drought Supply Considerations.

A key concern raised by Cal-Am and others about the Pure Water Expansion is whether it would be able to provide sufficient water supply during multiple years of drought. The Project Final EIR/EIS described concerns about whether even the first phase of the Pure Water project would provide sufficient water during multiple drought years, and it based the approved size and volume of the desalination facility, in part, with this concern in mind.²³⁵ MPWMD has evaluated how much water would be available during multiple drought years and determined that, with the Pure Water Expansion adding water to the ASR project each year and with the current level of demand and expected increases in that demand, Cal-Am's portfolio could provide adequate water for multiple drought years.²³⁶ MPWMD's modeling purports to show that the amount of water stored in the ASR would increase at a rate allowing it to contribute water to Cal-Am's water supply portfolio during an increasing number of drought years through time. Starting in 2020, MPWMD asserts that the ASR would provide between about 4,750 and 5,950 acre-feet per year and by 2024 would have enough water stored to provide for about two years of drought and by 2034 would have enough stored for at least four years of drought and possibly longer. MPWMD also assumes that no drought will occur on the Peninsula between now and 2034.

As discussed above, these assumptions are unrealistic. First, ASR using excess Carmel River water in the past 15 years has not shown the ability to consistently provide 1,300 acre-feet in any given year, much less a drought year. Between 2005 and 2019, annual ASR reinjection only reached the 1,300 acre-feet twice and only achieved the 1,300 acre-feet output assumed by the Updates once.²³⁷ Further, as shown in Table 6-2, from Cal-Am's Urban Water Management Plan, ASR is significantly reduced in dry years and unavailable in drought years. Finally, ASR has not proven itself capable of building a sufficient drought reserve to consistently deliver 1,300 acre-feet based on average

²³⁵ See, for example, the Final EIR/EIS Section 8.2.13 at pages 117-18, which states: [t]he recent severe, five-year drought demonstrated that it is not reasonable to assume that there would never be drought conditions that could deplete ASR reserves and prevent new ASR supplies being diverted from the Carmel River for storage and use. Consequently, changes in plant sizing based on scenarios that assume the availability of adequate ASR supplies would need to be considered carefully.

²³⁶ See Exhibit 20 – Final Supplemental Environmental Impact Report for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, April 2020, Appendix M: Source Water Operational Plan Technical Memorandum.

²³⁷ Exhibit 25 – August 11, 2020 Hazen Memo, pp. 5, 19.

annual storage over the last 15 years (138 acre-feet) and five years (352 acre feet)²³⁸
Since ASR has not been able to store 1,300 feet consistently, it cannot be relied upon to deliver 1,300 acre-feet in any given year or a consecutive year period.²³⁹

In order to achieve the amount of storage that MPWMD claims, it would require more than a decade without any drought on the Peninsula. MPWMD's assumption that the Peninsula will not experience drought conditions over any significant period is not reasonable given that California has experienced a multi-year dry period or drought in every decade for the last century. As shown in Table 7 above, during drought conditions, ASR water is essentially unavailable, which would increase the supply deficit that would result from adding the Pure Water Expansion to Cal-Am's existing water supplies. There is simply no assurance that sufficient water is available for ASR reinjection and storage in any given year, much less to build up adequate storage during drought years. As a result, the Commission cannot rely on the availability of 1,300 acre-feet per year from ASR as part of the water supply portfolio.

The Pure Water Expansion also fails to comply with California mandates designed to ensure that as climate change continues, water suppliers remain capable of providing a drought-proof supply to their customers. Governor Newsom's 2020 Water Resilience Portfolio requires that water suppliers plan for prolonged drought conditions, and "[d]evelop strategies to protect communities and fish and wildlife in the event of a drought lasting at least six years."²⁴⁰ As discussed, during Normal/Wet years and in Dry years, the Pure Water Expansion would not be able to achieve MPWMD's low-end demand projections for the Peninsula of 10,855 acre-feet per year due to limitations on the available source waters for the Pure Water Expansion. This deficit will only increase during prolonged periods of drought. As such, the Pure Water Expansion would not meet the state's water supply resilience goals, further confirming that is not a feasible alternative to Cal-Am's Project. In contrast, the source water for the proposed Project, the Pacific Ocean, is not vulnerable to drought.

Therefore, since the Pure Water Expansion and existing supply sources would not meet water demand needs on the Peninsula during prolonged drought conditions, the Expansion cannot serve as a viable alternative to the Project during such conditions.

Pure Water Expansion Supplies Do Not Meet Demand.

As shown in Table 7, when ASR is accounted for at a realistic level, the Pure Water Expansion cannot meet the lowest estimate of 10,855 acre-feet per year demand. Likewise, when WWTP flows and Reclamation Ditch flows are accounted for based on current flow data, the Pure Water Expansion cannot meet 10,855 acre-feet per year demand. These scenarios are not exclusive, and despite generously assuming that all other sources are available, the supply deficit would likely be even greater than as depicted in Table 7, particularly during drought years. Accordingly, the Pure Water Expansion is not capable of providing the Cal-Am Monterey service area with reliable water supplies across reasonable and probable scenarios, such as prolonged drought

²³⁸ Exhibit 25 – August 11, 2020 Hazen Memo, p. 5.

²³⁹ Exhibit 25 – August 11, 2020 Hazen Memo, p. 5.

conditions, and cannot meet projected demand using reasonable and realistic assumptions.

3) How does the Pure Water Expansion conform to the Final EIR/EIS Project Objectives and Criteria used for Cal-Am's Project?

In order to qualify as a feasible alternative to a proposed ~~Project~~project, an alternative generally must feasibly accomplish most of the basic objectives of the project. The Findings below ~~compares~~compare the two projects as to whether they meet the project objectives selected as part of the CPUC's Final EIR/EIS and its Final Decision. Those documents included nine primary objectives and three secondary objectives, all of which are provided below, followed by a brief description of how the two projects conform to them. For purposes of this comparison, the Commission assumes that ~~Cal-Am~~Cal-Am would be successful in gaining approval for use of the shared pipeline, described above, that is critical to ~~its project's~~the Project's feasibility, though it acknowledges that this issue is not yet resolved. Following this comparison, the Findings then evaluate the Pure Water Expansion against the nine criteria the CPUC applied to the initial phase of the Pure Water project to determine ~~that~~whether it was a suitable and reasonable source of water supply for Cal-Am. ~~As noted above, the CPUC determined that although the Pure Water Expansion was speculative at the time of its decision, if built, it would satisfy the basic and key project purposes.~~

Final EIR/EIS primary objectives:

- ~~1.~~ 4. Develop water supplies for the Cal-Am Monterey District service area to replace existing Carmel River diversions in excess of Cal-Am's legal entitlement of 3,376 afy, in accordance with SWRCB Orders 95-10 and ~~2016-0016~~2016- 0016: As described above, ~~including either project as part of~~only Cal-Am's ~~water supply portfolio~~Project would allow Cal-Am to replace its excess diversions from the Carmel River and meet the Peninsula's water demand.
- ~~2.~~ 2. Develop water supplies to enable Cal-Am to reduce pumping from the Seaside Groundwater Basin from approximately 4,000 to 1,474 afy, consistent with the adjudication of the groundwater basin, with natural yield, and with the improvement of groundwater quality: As ~~described in the CEQA documents for both~~discussed above, only Cal-Am's Project ~~and would enable Cal-Am to reliably reduce pumping from the Seaside Groundwater Basin. The Pure Water Expansion would not supply water sufficient to meet even the lowest projection of Peninsula water demand (10,855 acre-feet per year), and therefore poses a significant risk that operation of the Expansion without desalination would not allow Cal-Am to reduce its Seaside Groundwater Basin withdrawals.~~²⁴¹ The CPUC also has noted that the Pure Water Expansion, ~~both projects are designed to meet this objective. The Pure Water project and the Pure Water Expansion have contracts and agreements for more than the amount of water they will need, so there is likely to be sufficient water, even if those full amounts are not available. could not "provide supply to allow for replenishment of water that Cal-Am previously pumped from~~

²⁴¹ See Seaside Groundwater Master Letter, p. 2; see also Exhibit 25 – August 11, 2020 Hazen Memo, p. 6; June 30, 2020 Cal-Am Letter to Commission, p. 65.

the Seaside Basin in excess of Cal-Am's adjudicated right²⁴²

3. ~~3.~~ Provide water supplies to allow Cal-Am to meet its obligation to pay back the Seaside Groundwater Basin by approximately 700 ~~afy~~acre-feet per year over 25 years as established by the Seaside Groundwater Basin Watermaster: ~~Similar to Like~~ the above, ~~both projects are designed to~~only Cal-Am's Project could reliably meet this objective.²⁴³
4. ~~4.~~ Develop a reliable water supply for the Cal-Am Monterey District service area, accounting for the peak month demand of existing customers: As described above, ~~both projects are sized to accomplish~~only Cal-Am's Project would be able to provide a sufficient water supply to meet peak monthly demand. (See Section IV.O.2, supra.) MPWMD's conclusion that the Pure Water Expansion can meet MDD and PHD assumes that no drought conditions will occur on the Monterey Peninsula between now and 2034. This assumption is untenable, given that California has experienced a multi-year drought in every decade for the last century, and recharge of groundwater reserves is essentially unavailable under drought conditions. (See Section IV.O.2, supra. As a result, only Cal-Am's project is capable of meeting this objective.
5. ~~5.~~ Develop a reliable water supply that meets fire flow requirements for public safety: As described above, ~~both projects are designed to meet maximum daily demand and peak hour demands, which are intended to provide the required factor of safety to ensure public water systems can meet emergency demands.~~only Cal-Am's Project can meet even the most conservative projections of demand for Cal-Am's service area (10,855 acre-feet per year). (See Section IV.O.2, supra.) The appropriate way to ensure adequate capacity is by calculating demand based on maximum month demand ("MMD) as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)), which was not done to arrive at the 10,855 acre-feet demand scenario.²⁴⁴ Nevertheless, because the Pure Water Expansion cannot provide sufficient water supplies to achieve 10,855 acre-feet of demand, Pure Water Expansion cannot provide a reliable water supply that meets relevant fire flow requirements.
6. ~~6.~~ Provide sufficient water supplies to serve existing vacant legal lots of record: The buildout of existing lots of record has the potential to cause current water demand on the Peninsula to grow. The rate of growth due to this buildout is disputed by Cal-Am, MPWMD and others. However, a determination of the rate of growth as a result of buildout is not required. As described above, ~~adding either project to Cal-Am's water supply portfolio would provide sufficient water for the area's lots of record.~~the Pure Water Expansion is not capable of meeting the low projected demand of 10,855 acre-feet per year without desalination, which does not even take into consideration higher housing demand projections from cities in

²⁴² See CPUC Decision D.18-09-017, p. 40.

²⁴³ See Seaside Groundwater Master Letter, p. 2; see also Exhibit 25 – August 11, 2020 Hazen Memo, p. 6; June 30, 2020 Cal-Am Letter to Commission, p. 65.

²⁴⁴ June 30, 2020 Cal-Am Letter to Commission, p. 61.

Cal-Am's service territory like Monterey.²⁴⁵ Accordingly, the Pure Water Expansion does not satisfy this objective.

- 7. 7. Accommodate tourism demand under recovered economic conditions:** As described above, ~~adding either project to Cal-Am's water supply portfolio even if the lowest demand projection for the Peninsula is accepted, the addition of the Pure Water Expansion to Cal-Am's existing water supplies (without the addition of the proposed Project) is insufficient to meet 10,855 acre-feet per year demand and therefore could not accommodate tourism demand. In contrast, Cal-Am's Project~~ would allow for an ~~expected~~ increase in tourism demand for water over the coming two decades or longer.²⁴⁶
- 8. 8. Minimize energy requirements and greenhouse gas emissions per unit of water delivered:** The Pure Water Expansion would use about 23,000 megawatt hours per year of electricity, ~~almost all of which will be~~ is proposed to be generated by landfill gas that would otherwise be released to the atmosphere, as well as 45 megawatt hours per year of electricity from the grid. However, Monterey One Water has not yet secured construction bids to build the infrastructure that would support this conversion and the bids it has received far exceed its original estimates. If Monterey One Water cannot secure reduced bids or obtain additional funding, it cannot implement this landfill gas power system. Accordingly, the greenhouse gas emissions of the Pure Water Expansion are somewhat unknown at this time. Cal-Am's Project would use about ~~52,000~~ 38,000 megawatt hours per year, potentially from grid-based electricity that currently represents production of ~~about 8,000~~ just over 5,188 metric tonnes of CO2 equivalent per year. (See Section K, supra.) However, the CPUC imposed a mitigation measure that requires Cal-Am's operations to ~~be carbon neutral~~ result in net zero operational emissions, either through securing on-site or off-site renewable energy, or purchasing and retiring renewable energy or carbon credits. Overall, Cal-Am's electrical use would be, both initially and over the long term, ~~significantly~~ higher than that of the Pure Water Expansion, although it would also produce more water. Per unit of water delivered, it appears that Cal-Am's Project would have slightly lower energy use; ~~however, unless it was powered by renewable energy sources, it would result in generation of more greenhouse gas emissions than the Pure Water Expansion, thus the need for Cal-Am's mitigation requirement to obtain emission offsets.~~ Emissions related to both projects' electricity use ~~is~~ are slated to be carbon neutral, though they would reach that goal through different means. ~~The Pure Water Expansion is slated to use landfill gas that otherwise enters the atmosphere, which would be carbon benefit. Cal-Am may achieve its carbon neutrality through a combination of renewable energy purchases and offsets, which are less certain to provide actual greenhouse gas benefits (see also Section II.J of these Findings). In fact, a recent court decision rejected another agency's use of the same type of carbon offsets that the CPUC imposed on Cal-Am, finding that they were not certain to result in verifiable and permanent carbon reductions. Golden Door Properties, LLC v. County of San Diego (2020) 50 Cal.App.5th 467. Overall for this objective, Cal-Am would use more energy and is less certain to offset the emissions caused by its use of energy, though the Expansion project~~

²⁴⁵ See Exhibit 29 – February 4, 2020 City of Monterey Letter to MPWMD, p. 1.

²⁴⁶ See June 30, 2020 Cal-Am Letter to Commission, pp. 66-67.

~~may use more energy per unit of water.~~

9. ~~Minimize project costs and associated water rate increases: The PWM Pure Water Expansion conforms to this objective far better than the Cal-Am project. Pure Water's capital costs are roughly a quarter or a third of Cal-Am's; its water costs are about a third of Cal-Am's, and the effects on water rates are expected to be similarly less than Cal-Am's.~~
9. Minimize project costs and associated water rate increases: The CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single family residence for the desalination facility, and that increase is not directly tied to per acre-foot water costs, and that rate will not be affected by any growth in per acre-foot water costs.²⁴⁷ This is because the CPUC already determined the rate increase for Cal-Am's customers for the desalination facility based on a calculation of the annual revenue required to repay capital costs to build the facility, including set financing repayment requirements, and the annual facility operations and maintenance. How much water the facility ultimately produces (or does not produce) is not a material variable in rates that customers are charged, except for minor, incremental operating and maintenance costs. It is uncertain whether the Pure Water Expansion conforms to this objective, as new evidence suggests the project's projected costs continue to increase. As of June 2020, Monterey One Water stated that at the current projected delivery of 2,030 acre-feet per year, costs for Pure Water project water would increase to \$3,678 per-acre-foot. Under the most optimistic scenario presented by Monterey One Water, the Pure Water project water costs will amount to \$2,508 per-acre-foot. This represents a 50 percent increase over the water rate approved for the Pure Water project by the CPUC. Moreover, an increase in the Pure Water Expansion's costs is made more likely by recent information, which suggests the project will not have sufficient source water to meet the area's demands. (See Section IV.O.1, *supra*.) Finally, current costs projections for Pure Water Expansion do not account for costs already spent on the Cal-Am desalination facility, which will be recovered via water rate increases that could increase customer bills by approximately \$10 to \$20 per month even if the desalination facility is never built. Accordingly, is it uncertain, if not doubtful, whether the Pure Water Expansion satisfies this final, Project objective.

Final EIR/EIS secondary objectives:

1. ~~4. Locate key project facilities in areas that are protected against predicted future sea-level rise in a manner that maximizes efficiency for construction and operation and minimizes environmental impacts: Cal-Am's well field, located several hundred feet from the Monterey Bay shoreline, would likely be affected directly by sea level rise and the accompanying erosion of the shoreline. As described above in Section II.H of these Findings, the initial effect on the wells would be from the dune recession that will accompany this coastal erosion—as the shoreline profile moves inland, the foredunes that are seaward of the well field would move inland and bury the well heads. The wells would later be subject to coastal erosion. The Commission's current sea level rise projections show that the well heads would likely be subject to dune recession by about 2040 and would~~

²⁴⁷ See August 13, 2020 Latham Letter to Commission, p. 1, Exhibit 1, p. 3 n.4 (citing Attachment C-1 to Advice Letter No. 1220-A from California-American Water Company to CPUC).

~~be affected by erosion around 2060. The state's more recent guidance to consider a higher scenario of 3.5 feet of sea level rise by 2050 would result in burial and erosion several years sooner. Although Cal-Am has stated that it may avoid these impacts because it expects the wells to operate for no more than 20-25 years, it has not identified where it could relocate the wells. Conversely, the~~As discussed in Section IV.H, Cal-Am's Project is not expected to face any impact from coastal erosion or rising sea levels during the economic life of the Project's slant wells and is consistent with this Secondary Objective. (See Section IV.H; see also AECOM Coastal Erosion Hazard Analysis.) The Expansion would take place at an inland location outside of the coastal zone and is likely to experience few, if any effects of sea level rise.

2. ~~2.~~ Provide sufficient conveyance capacity to accommodate supplemental water supplies that may be developed at some point in the future to meet build out demand in accordance with adopted General Plans: As described ~~in Exhibit 17—Monterey Peninsula Water Management District~~above, Cal-Am's Project would provide adequate conveyance capacity to meet build out demand in accordance with adopted General Plans. The Pure Water Expansion does not appear able to provide adequate conveyance to meet even the lowest projection of demand presented by MPWMD. Exhibit 19 – MPWMD Analysis of Available Well Capacity for 10-Year Maximum Daily Demand (MDD) and Peak Hour Demand (PHD), does not explain how the Pure Water Expansion ~~has been planned to project will~~ provide ~~adequate excess~~ conveyance ~~to meet the expected water demands.~~capacity for future water projects, as is required to satisfy Secondary Objective 2.²⁴⁸ Moreover, based on the most recent analysis provided by Hazen and Sawyer, the Pure Water Expansion project does not appear able to meet PHD.²⁴⁹ Although, the Pure Water Expansion project may have sufficient conveyance capacity, it does not appear able to satisfy this objective because there is insufficient source water for the Expansion to meet its delivery promises. Accordingly, the Pure Water Expansion does not satisfy this secondary objective.
3. ~~3.~~ Improve the ability to convey water to the Monterey Peninsula cities by improving the existing interconnections at satellite water systems and by providing additional pressure to move water over the Segunda Grade: ~~Both projects are able to meet this objective, though only if Cal-Am is able to use the distribution pipeline it shares with the Marina Coast Water District or builds a new pipeline (see Section II.A of these Findings).~~The Commission has not received evidence indicating that the Pure Water Expansion would satisfy this Secondary Objective. In contrast, as explained above, existing agreements permit Cal-Am to utilize the shared pipeline, and the pipeline has ample capacity to serve Cal-Am's uses for the Project.²⁵⁰ If Cal-Am is required to construct an additional, parallel pipeline to carry Project water, that potential additional pipeline remains before MPWMD for approval, and will be considered by the MPWMD Board at a later date.²⁵¹ Because only Cal-Am's Project has demonstrated that it will improve

²⁴⁸ See June 30, 2020 Cal-Am Letter to Commission, p. 68.

²⁴⁹ See Exhibit 24 – August 23, 2020 Hazen Memo, p. 6.

²⁵⁰ See June 30, 2020 Cal-Am Letter to Commission, pp. 54-55.

²⁵¹ See July 31, 2020 MPWMD Board of Directors Meeting Final Minutes, p. 1.

existing interconnections via the shared pipeline or the construction of a parallel pipeline, it is more likely to satisfy this secondary objective.

Applying the criteria used by the CPUC for the Pure Water project to the Pure Water

Expansion: During the CPUC's review of Cal-Am's proposed Project, it evaluated several other water supply alternatives to consider whether they could help meet the above project objectives. In 2017, the CPUC applied nine criteria to determine that the then-proposed Pure Water project would provide a reliable 3,500 acre-feet of water per year, which would allow for a smaller desalination facility than Cal-Am had originally proposed – i.e., a 6.4 million ~~afy~~acre-feet per year facility instead of a 9.6 million ~~afy~~acre-feet per year facility.⁴³⁷²⁵² To determine whether the proposed Pure Water project would provide a suitable and reliable water supply source, the CPUC had, in 2016, evaluated the Pure Water project against nine criteria, which are provided below. For each of those nine criteria, these Findings compare the status of the Pure Water project at the time of the CPUC's decision with the current status of the Pure Water Expansion.⁴³⁸²⁵³ This comparison is meant to help determine whether it is similarly reasonable for the Commission to now consider the Pure Water Expansion as a feasible project alternative.

- **Criterion 1 – Final EIR:** The CPUC evaluated whether the Pure Water project had an approved EIR, whether it was subject to a CEQA lawsuit, or whether it was subject to a stay due to any such lawsuit. At the time of the CPUC's decision regarding Cal-Am's Project, the Pure Water project had a completed EIR and was not subject to lawsuits or stays. In applying this criterion to the Pure Water Expansion, that project has ~~a Final SEIR~~an FSEIR that that has ~~been drafted but~~ not yet been certified by ~~the lead agency. Even though the Pure Water Expansion has not quite advanced to the degree the Pure Water project had been at the time of the CPUC's decision, it raises essentially the same issues that were successfully addressed, without challenge, as part of the Pure Water project~~Monterey One Water. After receiving several comments that raised substantial concerns regarding the Pure Water Expansion, the Monterey One Water Board voted to deny certification of the FSEIR on April 27, 2020. Moreover, Monterey One Water has stated that it does not possess the funding to remedy the deficiencies in the Pure Water Expansion FSEIR, and the Monterey One Water Board has ordered its staff to stop all work on the Expansion. As such, CEQA approval for the Pure Water Expansion has not occurred, and the project does not meet this feasibility criteria. Moreover, as discussed in Section IV.O.1, if Monterey One Water eventually chooses to certify the FSEIR, it will likely have to recirculate the FSEIR, respond to public comment, and revise the document before it can be certified, in light of significant new information regarding the availability of source water for the Pure Water Expansion, and the need to construct additional Pure Water deep injection wells, among other issues. Accordingly, the Pure Water Expansion does not satisfy the criterion of having a final EIR.
- **Criterion 2 – Permits:** This criterion was used to determine the status of permits needed to construct and operate the Pure Water project, including whether they had

⁴³⁷²⁵² See California Public Utilities Commission, Decision 16-09-021, issued September 22, ~~2406~~2016.

⁴³⁸²⁵³ The ~~PWM~~Pure Water project sponsors initially prepared a status report in 2018 that applied these nine criteria to the ~~PWM~~Pure Water Expansion. (See May 10, 2018 Progress Report on Pure Water Monterey Expansion, prepared by Monterey One Water.) These Findings provide an update of the conclusions of that 2018 Progress Report.

been obtained or whether the weight of evidence showed that they were likely to be obtained in a timeframe consistent with the project's proposed schedule. At the time of the CPUC decision, the Pure Water project had not yet obtained several key permits, but the CPUC determined that its sponsors were working diligently to obtain the needed approvals and there was no indication they would not be able to obtain them. ~~The Pure Water Expansion similarly has not obtained all of its needed permits; however, those permits are generally expected to be modified versions of permits the Pure Water project has since obtained. At this point, neither~~ Here, the Pure Water Expansion ~~nor Cal-Am has not obtained any of its needed permits. Accordingly, it is doubtful the Pure Water Expansion~~ would be able to complete construction and start operations in time to meet the December 2021 deadline established in the State Water Board's ~~cease-and-desist order; however, as described below, the path forward~~ CDO. As described in Section IV.Q.1, additional delays for construction permitting can be expected due to the likely need for recirculation of the Pure Water Expansion's FSEIR. Monterey One Water cannot obtain any discretionary permits for the Pure Water Expansion ~~involves fewer such obstacles than the Cal-Am Project, and can therefore be expected to be online at least as soon if not sooner, until it has certified the FSEIR. Accordingly, the Pure Water Expansion falls short of this criterion.~~

- Criterion 3 – Source waters:** This criterion was meant to establish whether there was sufficient legal certainty as to whether the Pure Water project had adequate source water. At the time of the CPUC's decision, the Pure Water project had agreements that could provide it with more than the amount of water it needed to produce the expected 3,500 acre-feet per year, and it was seeking approval for additional amounts. ~~The Pure Water Expansion would use the same water sources, and possibly others. As noted above, an August 20, 2020 Monterey One Water letter referred to the Pure Water Expansion's Final SEIR, which includes a detailed technical memorandum that uses a number of relatively conservative assumptions to evaluate several different scenarios—e.g., dry year versus wet year supplies, variable seasonal or annual amounts from different sources, etc.—and determined in each case that there would be sufficient water to produce the 2,250 acre-feet expected from the Pure Water Expansion (see Exhibit 18). Although some commenters questioned whether the Pure Water Expansion would have a sufficient, reliable supply of water, the project's Final SEIR states that “[n]o new source water diversion and storage sites are necessary to achieve the Expanded PWM/GWR Project's recycled water yield objective of an additional 2,250 AFY of replacement supplies.” It further notes that the Pure Water Expansion is designed to use water from existing Monterey One Water contractual rights. Several commenters contended that those contracts allow water to be used only for the Pure Water project, not the Pure Water Expansion. However, the contracts do not make such a distinction, so there appears to be adequate source water for both. Monterey One Water has at least one water source—about 8,000 acre-feet per year—that is not involved in this contractual uncertainty, is not needed by the baseline Pure Water project, and would reliably~~ As discussed in detail above, recent analyses demonstrate that there are not sufficient agreements in place to guarantee water supplies for the Pure Water Expansion, and that when examining available WTPP flows and surface flows that could be available, there is insufficient source water to provide the ~~approximately~~ 3,000 acre-feet per year that the Pure Water Expansion

would need to produce its 2,250 acre-feet per year.¹³⁹ ~~Also, As discussed above, there is a continuing decline of wastewater effluent directed to the Monterey One Water staff has stated that, in any event, it could use the certain water sources in question for ocean outfall, which based on Monterey One Water's flow information for 2020, is 5,554 acre-feet. Accordingly, when looking at outfall flows as a sole source of supply, there are insufficient flows to provide the necessary source water to both the Pure Water project, and reserve other water sources (that are not in question) for the Pure Water Expansion. Although some parties still debate whether there is a sufficient long-term water supply for the Pure Water Expansion, its Final Supplemental EIR sufficiently responds to and addresses those questions and provides substantial evidence that adequate source waters exist. Therefore, this criterion cannot be met because source waters are inadequate to produce the Pure Water Expansion's promised 2,252 acre-feet per year.~~

- Criterion 4 – Water quality and regulatory approvals:** Similar to Criterion 2, this criterion had the CPUC examine whether it was likely that the Pure Water project would obtain approvals from the state Department of Health and the Regional Water Quality Control Board for its proposed treatment and injection processes. Neither had been obtained at the time of the CPUC decision, though the CPUC noted that available evidence indicated that the approvals would be forthcoming. It cited additional assurance in that the expected water quality sampling and testing program would ensure project water quality would meet necessary health and safety standards and would protect uses of the aquifer. As noted above, the Pure Water project has since obtained those approvals and is now operating. ~~Both~~ Although the Pure Water project and the Pure Water Expansion use the same treatment methods ~~as approved at other permitted facilities of this type in California. Cal-Am and some other commenters submitted comments to Monterey One Water claiming that,~~ there are unresolved questions about the quality of treated water that would come from both projects. For instance, there are concerns about whether agricultural runoff water can be successfully treated since the Pure Water ~~Expansion. However, as described in the Final SEIR for the project (which has not yet been certified but which contains the most comprehensive analysis of these issues),~~ successfully treated any such water. Accordingly, there remains uncertainty about whether this criterion can be met by the Pure Water Expansion ~~“would not increase the quantity or type of new source waters that would flow into the [treatment plant] compared to the quantity and type of new source waters that were evaluated in the certified [EIR for the original PWM project].” In other words, the Monterey One Board has previously found that treatment of these source waters is feasible and will create water that meets state drinking water quality standards. As noted above, the current project schedule would allow the PWM Expansion to be constructed and operating about 24 to 27 months after obtaining the necessary permits. Once obtained, the Pure Water Expansion, which would use the same treatment systems and presumably have similar sampling and monitoring requirements, could be expected to obtain the new or amended version of these permits for its operation.~~
- Criterion 5 – Pure Water Expansion project schedule compared to desalination**

¹³⁹ ~~The Pure Water Expansion is designed to operate at a relatively high efficiency of about 80%—that is for every hundred gallons of source water, it would produce about 80 gallons of usable water.~~

schedule: At the time of CPUC Decision 16-09-021, the Pure Water project was expected to be completed in late 2017, with the desalination facility to be completed in mid-~~2019~~ 2019. Both schedules were delayed somewhat; however, the Pure Water project has been completed and started limited operations in March 2020. ~~Current expectations are that once construction starts for either facility, the Pure Water Expansion would take about 24 to 27 months to complete, while the desalination facility would take slightly longer. At this point, neither project would be able to meet the December 2021 deadline imposed by the State Water Board cease-and-desist order; however, the Pure Water Expansion would likely be available several months sooner than the desalination facility, though no water deliveries to Cal-am have been made to date. Currently, there is some degree of uncertainty as to whether Cal-Am can meet its expected desalination facility schedule, due to certain remaining project approvals and pending litigation. However, there is also uncertainty over the project schedule for the Pure Water Expansion. As discussed in Section IV.O.1, the Pure Water Expansion still requires certification of its FSEIR, approval by the CPUC of a Water Purchase Agreement, and final state and federal approval for its modified discharge into coastal waters. Specifically, the Monterey One Water Board has denied certification of the Pure Water Expansion FSEIR due to ongoing flaws in the FSEIR's analysis, and has ordered its staff to suspend work on the Pure Water Expansion. Even if staff resumes work, the FSEIR will need to be revised and recirculated for public comment to reflect significant new information, including new information concerning source waters and available wastewater flows, and the need to construct additional deep injection wells for the Pure Water project. (See Section IV.O.1.) This recirculation could add an additional 6 to 12 months before certification of the Final SEIR, further delaying the project's schedule. Until the FSEIR is revised and certified, it is speculative to assume that no litigation will occur.~~

~~There is some uncertainty about the timeline for the Pure Water Expansion, as it still needs to have its environmental review document certified and a Water Purchase Agreement approved by the CPUC. The initial Pure Water project was delayed for several months due to various scheduling issues typical of a complex industrial construction project. However, there is also doubt about whether Cal-Am can meet its expected desalination facility schedule, due to several issues, including: 1) the above-referenced lack of approval from the Marina Coast Water District to allow use of a shared pipeline and its lack of approval to build an alternative, parallel pipeline; 2) the uncertainty about the timing, effects, and any permitting needed for the outfall liner that Cal-Am must have installed before it can discharge its brine waste; 3) litigation related to Cal-Am's proposed use of groundwater from the Salinas Valley Groundwater Basin; and 4) litigation over Monterey County's approval of portions of the project in its jurisdiction, which so far has resulted in the Superior Court in mid-September 2019 issuing a temporary stay on construction activity. In addition, if the Commission were to approve the project, there is a substantial likelihood that its decision would also be challenged in court. These areas of concern do not apply to the Pure Water Expansion.~~

- **Criterion 6 – Status of Pure Water Expansion project engineering:** ~~This criterion required that the Pure Water project be developed to at least a 10% design level or that its development is at or beyond the level of engineering prepared for the desalination facility. At the time of the CPUC's decision, the various components of the Pure Water project were at anywhere from at least 10% to 100% design and~~

~~it therefore met this criterion. The project is now constructed and about to produce purified water. The Pure Water Expansion, being an expanded version of the existing facility, is well beyond this 10% design threshold. As discussed above, work on the Pure Water Expansion has been stopped. (See Section IV.O.1.) The Pure Water project has already encountered significant delays and cost overruns that have placed the project eight months behind schedule, and these issues are likely to translate to the Pure Water Expansion.²⁵⁴ Likewise, The Pure Water project has also encountered problems with its deep and shallow well injection, which has significantly reduced its delivery capacity.²⁵⁵ As a result, it is likely the Pure Water Expansion, which relies on the same technology, will encounter similar issues. Concerns also have been raised regarding the Pure Water Expansion's ability to rely on certain source waters, including agricultural wash from the Salinas Valley.²⁵⁶ In light of these concerns and comments raising environmental concerns with the Pure Water Expansion's SEIR, the Monterey One Board has denied certification of the FSEIR, and staff has been ordered to suspend work on the Pure Water Expansion. (See Section IV.O.1.) Accordingly, project engineering of the Pure Water Expansion is not proceeding, and this criterion is not satisfied.~~

- Criterion 7 – Pure Water Expansion project funding:** This criterion required that Pure Water project funding be detailed sufficiently for the project to apply to a State Revolving Fund loan. At the time of the CPUC decision, Monterey One Water had applied for that loan and had received confirmation from the State Water Board that its application was complete and that would be eligible for a relatively low (1%) interest rate on the loan. It has also received over \$100 million in grants and loans from state and federal agencies. ~~For additional needed funding, the Pure Water Expansion would rely on a commitment from Cal-Am to purchase the water it produces (through a Water Purchase Agreement approved by the CPUC – see below). Cal-Am has not yet pursued such an Agreement, largely because it is proposing the desalination project instead; however, it would be within Cal-Am's control to work expeditiously toward a Water Purchase Agreement if it decided to pursue the PWM Expansion project.~~ However, as discussed above, the Monterey One Water Board has denied certification of the Pure Water Expansion's FSEIR and lacks the funds to address the substantial flaws in the FSEIR's analysis. Additionally, any Water Purchase Agreement for Pure Water Expansion water also would need to incorporate additional terms beyond those included in the Pure Water project Water Purchase Agreement, including guarantees for the full production volume of the Expansion, and full indemnification to Cal-Am or all risks, liabilities, or penalties in the event that the Pure Water Expansion fails to provide an adequate supply for any reason. Such assurances would be necessary to ensure that Cal-Am does not need to undertake additional Carmel River or Seaside Basin water withdrawals to serve its customers if water demand cannot be met by the Pure Water and Pure Water Expansion projects. These additional terms also could

²⁵⁴ See August 13, 2020 Cal-Am Letter to Commission, p. 4; August 12, 2020 Cal-Am Letter to Commission, pp. 1-3.

²⁵⁵ See August 13, 2020 Cal-Am Letter to Commission, p. 4; August 12, 2020 Cal-Am Letter to Commission, pp. 1-3.

²⁵⁶ See August 13, 2020 Cal-Am Letter to Commission, p. 4; August 12, 2020 Cal-Am Letter to Commission, pp. 3-5.

result in a higher project cost.²⁵⁷ Accordingly, the Pure Water Expansion lacks necessary project funding and does not meet this criterion.

~~Cal-Am and other commenters recently expressed concern that Monterey One Water's finances, which have diminished recently, would not be adequate for the funding and staffing needed to construct and operate the Pure Water Expansion. However, Monterey One Water staff have clarified that funding for the Expansion would be separate from other general Monterey One Water funds, and once Cal-Am received an approved Water Purchase Agreement, would likely be administered through bond purchases or other similar instruments.~~

- **Criterion 8 – Reasonableness of Water Purchase Agreement terms:** This criterion was meant to ensure that Cal-Am and the Pure Water project sponsors had concurred on a “just and reasonable” water purchase agreement. The CPUC determined, at the time of this 2017 decision, that the agreement that the parties had reached in 2016 met this criterion. The agreement included a first-year cost cap and a provision that Cal-Am would pay only the actual costs for Pure Water project water. Water from the Pure Water and Pure Water Expansion projects is expected to cost between about \$2,000 and \$3,000 per acre-foot, ~~both well~~ below the \$6,000 per acre-foot cost for water from ~~Cal-Am's Project.]Cal-Am's Project. However, Cal-Am and Monterey One Water have not reached any agreement for the purchase of Pure Water Expansion water, and the parties would need to agree to new performance standards in any such agreement to ensure a continued water supply in the event that the Pure Water Expansion cannot meet Peninsula demand.²⁵⁸ Accordingly, this criterion is not satisfied.~~
- **Criterion 9 – Reasonableness of the Pure Water Expansion project revenue requirement:** Similar to Criterion 8 above, the CPUC required for this criterion that the revenue requirement for the smaller desalination facility – i.e., the currently proposed facility – combined with Pure Water project was “just and reasonable” as compared to the revenue requirement of the larger proposed desalination facility alone. At the time of this 2017 decision, there was a great deal of uncertainty about expected Pure Water project costs, but the CPUC determined that it was reasonable to move forward with the combination of a desalination facility and Pure Water project, based in part on the ~~first-year~~first-year cost cap referenced in Criterion 8, on an evaluation of the likely “indifference cost” of the two options,⁴⁴⁰²⁵⁹ and on the broader benefits provided by the Pure Water project, such as supporting aquifer recharge, having lower greenhouse gas emissions, and others. There is, in fact, more ~~certainty at this point than during the 2017 decision about the expected costs of all the projects, which provides more certainty about~~uncertainty regarding Pure Water Expansion now than when the CPUC reached its 2017 decision. The Pure Water project has incurred major cost overruns and faces ongoing technical obstacles, thereby driving up projected Pure Water project water rates. It is likely that the Pure Water Expansion will face

²⁵⁷ See June 30, 2020 Cal-Am Letter to Commission, p. 72.

²⁵⁸ June 30, 2020 Letter to Commission, pp. 72-73.

⁴⁴⁰²⁵⁹ The CPUC's 2017 decision describes the “indifference cost” as the range of costs within which ratepayers are indifferent as to whether they are paying for water from the larger desalination facility or the smaller facility in combination with the PWM. This range was determined to be between \$1,178 and \$2,062, which bracketed the expected first-year cost cap of \$1,720.

similar cost overruns, and therefore it would be speculative to reach a conclusion on the reasonableness of ~~expected~~the Pure Water Expansion's project revenue requirements. Moreover, as discussed above, new significant information indicating that the Pure Water Expansion lacks sufficient source water to meet its promised water deliverables is only likely to further increase costs. Accordingly, the Pure Water Expansion cannot currently satisfy this criteria.

4) Adverse environmental effects of each project

As noted above and in the Findings of this report, Cal-Am's proposed Project would be inconsistent with Coastal Act and Marina LCP policies regarding sensitive habitat including wetland/vernal pond ESHA. (See Sections F, G, *supra*.) But with the implementation of Special Conditions 5 and 6, the Commission will have adopted all feasible mitigation to reduce potential ESHA impacts, including potential wetland/vernal pond ESHA impacts. Further, the Cal-Am Project will be consistent with all other Coastal Act and LCP policies with implementation of Special Conditions. (See Section IV.O.1, *supra*.) In contrast, significant questions remain unresolved regarding the environmental impacts of the Pure Water Expansion, and the FSEIR for the Expansion requires substantial additional analysis. As a result of these flaws, the Monterey One Water Board denied certification of the FSEIR for the Expansion. (See Section IV.O.1, *supra*.)

~~As noted above and in the Findings of this report, the Cal-Am project would have significant adverse effects on several coastal resources, including environmentally sensitive habitat areas and endangered or threatened species (see Section II.F—Environmentally Sensitive Habitat Areas). Its effects on marine life and ocean water quality have not yet been determined. The Pure Water Expansion would have few, if any, adverse effects on coastal resources, as it would be located entirely outside of the coastal zone and would be constructed largely on an existing industrial site. It would also~~ is designed to be greenhouse gas neutral, as it ~~would~~ proposes to use electricity generated from landfill gasses. ~~Although the Cal-Am~~ As explained previously, Cal-Am's Project would rely on grid-supplied electricity, which generally has a current emissions rate of up to several hundred pounds of greenhouses gasses per megawatt-hour. However, the CPUC imposed a mitigation measure (MM 4.11-1) that requires ~~the Project to have net zero greenhouse gas emissions from electricity used during Cal-Am's operations. However, this mitigation is less certain to result in permanent, enforceable, and verifiable greenhouse gas reductions than the mitigation for the Pure Water Expansion's emissions. net zero operational emissions, either through securing on-site or off-site renewable energy, or purchasing and retiring renewable energy or carbon credits. (See Section IV.K, *supra*.) Thus, emissions related to both projects' electricity use are slated to be carbon neutral, though they would reach that goal through different means.~~

An underlying environmental concern applicable to both projects is the potential effect of ~~Cal-Am~~ Cal-Am not having an adequate water supply project in place by December 2021 so that it can meet its obligation under the State Water Board's ~~cease-and-desist order~~ CDO to reduce its withdrawals from the Carmel River to no more than its legal limit. ~~Cal-Am has a supply of "banked" water in the Seaside Aquifer that it may be able to rely on for some period of time, but it~~ is possible that Cal-Am would seek, and obtain, an extension to allow completion of its desalination facility or of Pure Water Expansion if needed, which could lead to continued excessive water withdrawals from the Carmel River until the new project was ready. This would result in further adverse effects in the Carmel River ecosystem and specifically to the steelhead that are listed as threatened. However, as noted above, the Cal-Am project Pure

Water Expansion appears to have as great or a greater risk of delay than does the ~~Pure Water Expansion, so~~ desalination Project due the Monterey One Water Board's decision not to certify the FSEIR, the lack of resources needed to revises the analysis in the FSEIR and the potential need to recirculate the FSEIR for further public review. Accordingly, this potential environmental effect is ~~at least as~~ likely to occur if the Cal-Am project moves forward ~~at the expense of the Pure Water Expansion.~~

5) Areas of Uncertainty

Both projects involve areas of uncertainty, albeit over different issues, as described below. These issues relate to whether the Pure Water Expansion is a feasible alternative, as well as to whether the public welfare would be adversely affected if ~~Cal-Am's~~ Cal-Am's Project were not approved:

Pure Water Expansion:

- Amount of water produced: ~~The~~ As discussed above, the baseline Pure Water project started operating in March 2020, but its annual production volume is currently lower than the full expected amount – ~~about 170~~ currently around 2,030 acre-feet per month ~~versus its average expected 290 acre-feet per month. However, the operator, Monterey One Water, has identified the problems – two wells that are not injecting water into the aquifer at the expected rate and a sinkhole at another well site – along with proposed solutions to those problems: installing an additional injection well and “swabbing,” or cleaning one of the existing wells. Monterey One Water is scheduling the swabbing for later this year and the installation of the new well sometime next year. With the new components, Monterey One Water expects the injection rates to improve and provide more than the expected volume – up to about 330 acre-feet per month~~ year out of a planned 3,500 acre-feet per year.²⁶⁰ This shortfall is the result of sinkholes and subsidence affecting the Pure Water project short wells, as well as injection refusal in the deep wells. (See Section IV.O.1, supra.) To remedy these technological difficulties, Monterey One Water is proposing repairs to the shallow wells, to carry out final commissioning of the deep wells, and to install a third, and potentially a fourth, deep well. Until the work is completed, there will be uncertainty about exactly how much water can be produced; ~~however, injection wells and these cleaning methods are common and proven technologies, so Monterey One Water's estimates can be considered relatively reliable. Additionally, and as noted previously, these types of adjustment are common and typically necessary as part of the start-up of complex water treatment plants. Finally, the Pure Water project description anticipated this initial lower production, noting that its first-year production would be about 1,000 acre-feet per year, not the full 3,500 acre-feet per year. Some commenters have stated that these start-up issues demonstrate that the Pure Water project, and by extension the Pure Water Expansion, may not provide as much water as promised, and that the Pure Water Expansion therefore should not be relied on as an alternative project. However, the evidence so far does not support these assertions; as described above, the start-up issues are being dealt with and are not entirely unexpected.~~ by the Pure Water project, and it is not clear that the baseline project will be capable of

²⁶⁰ See August 12, 2020, Cal-Am Letter to Commission, p. 2.

supplying its full projected outlay.

- **Type of Availability and type of source water:** The Pure Water project is treating several types of source water, including treated wastewater, stormwater, and agricultural runoff, which is considered one of the more difficult water source to treat. Several commenters have raised concerns that the Pure Water Expansion's treatment methods will not adequately treat this type of water. ~~As noted above, complex water treatment facilities such as PWM generally expect to adjust treatment as needed to address changes in source water, and the treatment methods it uses are commonly used in such facilities. The FEIR for the original Pure Water project analyzed treatment of agricultural source waters and found that they could be adequately treated, and the Pure Water project has, in fact, started treating that water source, as approved by the State Water Board's Department of Drinking Water. The Pure Water Expansion would use the same source waters that were analyzed in that document and are being successfully treated, including it Pure Water Expansion's ability to treat agricultural water runoff containing lingering concentrations of pesticides.~~²⁶¹ Moreover, there remains significant uncertainty regarding the availability of planned source waters for the Pure Water Expansion—the claimed water rights for the Expansion are highly disputed, and substantial evidence demonstrates that WWTP and surface water flows for use as Pure Water Expansion source water are significantly less than assumed by Monterey One Water. (See Section IV.O.1, *supra*.) Based on the available evidence, the Pure Water Expansion does not have adequate source waters to enable the project to produce 2,250 acre-feet per year. As a result of this shortfall, the Pure Water Expansion would prevent Cal-Am from meeting even the lowest demand projection presented by MPWMD (10,855 acre feet per year).
- **CEQA:** A ~~Final SEIR~~ FSEIR has been prepared for the Pure Water Expansion, but ~~has not yet been~~ there is uncertainty as to when it may be certified. (See Section IV.O.1.) The Monterey One Water Board ~~considered certifying~~ of Directors denied certification of the FSEIR at its April 27, 2020 meeting. The ~~vote to certify it failed by a vote of 10 to 11. There was then a motion to deny certification of the Final SEIR and terminate any further action on the Expansion project, which also failed on a vote of 10 to 11. The effect is that the Final SEIR was not certified but that the Board remains free to reconsider the Final SEIR and project approval at a future hearing, if it so chooses. The main area of controversy that was raised during the Final SEIR public comment period relates to whether there is an adequate water supply for the Expansion. As described elsewhere in these Findings, the Final SEIR provides substantial evidence that the water supply is adequate for the Expansion, and arguments submitted by parties to this proceeding have not demonstrated otherwise.~~ Board did so in recognition of the significant remaining flaws in the FSEIR, including its analysis of source water availability for the Expansion, Peninsula supply and demand, impacts to agricultural water supplies, and the FSEIR's failure to evaluate the Expansion as either an alternative to or a cumulative project with the Cal-Am facility. Given that Monterey One Water does not possess the funding to correct these deficiencies, and has now ordered its staff to halt all work on the Pure Water Expansion, it is not certain when the Expansion will have a certified FSEIR. Until then, Monterey One Water cannot obtain any discretionary permits for the Expansion.

²⁶¹ See June 30, 2020 Cal-Am Letter to Commission, pp. 70-71.

- Funding and Water Purchase Agreement:** Cal-Am would need to seek CPUC approval of a Water Purchase Agreement in order to provide funding for ~~to~~ Monterey One Water to implement the Pure Water Expansion. Cal-Am has ~~not had an incentive to do this to date because it is pursuing its desalination project. However, there do not appear to be any practical barriers to such an approval being considered by the CPUC if Cal-Am needs to proceed with the Pure Water Expansion.~~ previously met with Monterey One Water and MPWMD to discuss a Water Purchase Agreement for Expansion water.²⁶² However, Cal-Am determined at that time that it could not yet pursue a Water Purchase Agreement for Pure Water Expansion water, given the ongoing uncertainties related to source water availability, environmental impacts, permitting requirements, funding, and product water pricing. As explained above, many of these uncertainties persist. Moreover, as discussed above, if the Pure Water project and the Pure Water Expansion were to become the primary water sources in Cal-Am's Monterey service area, any Water Purchase Agreement for Expansion water would need to include guarantees from Monterey One Water for the full production volume of the Expansion, and full indemnification to Cal-Am in the event that the Pure Water Expansion does not provide an adequate water supply.²⁶³ Such assurances would be necessary to ensure that Cal-Am does not need to undertake additional Carmel River or Seaside Basin water withdrawals to serve its customers if water demand cannot be met by the Pure Water and Pure Water Expansion projects. As such, it is not clear when or if Cal-Am and Monterey One Water would be able to enter into a Water Purchase Agreement for Pure Water Expansion water, or whether the CPUC would approve such an agreement.

Cal-Am:

- Cal-Am:** Coastal hazards and expected operating life of slant wells: ~~with~~With current sea level rise projections, incorporating the reduction in coastal erosion reasonably expected from the cessation of sand mining, Cal-Am's well field ~~could~~would not be affected ~~by dune recession as soon as 2040 and~~ by climate change-related coastal erosion ~~by about 2060. However, and along with the general uncertainty about the rate and severity of future climate change, there are two specific areas of uncertainty associated with the wells. First, as described above in Section II.H, the analyses anticipate that there will be a 60% reduction in the current rate of erosion resulting from the upcoming cessation of sand mining at the CEMEX site. While this appears to be a reasonable assumption, it cannot be verified because sand mining has not yet ended. Second, as part of its response to these hazards, Cal-Am expects its wells to have an operating life of 20 to 25 years, after which they would likely need to be relocated. While this limited operating life would likely allow them to avoid the effects of dune recession and coastal erosion, it raises uncertainty about what other locations might be available for the wells. There are no alternative, more landward locations for the wells within Cal-Am's easement, as they would be located at the most inland extent of Cal-Am's easement at the CEMEX site. Therefore, there is uncertainty about how the facility would operate after the first 20-25 years of its 60-year, including dune recession due to wave~~

²⁶² Exhibit 30 – March 19, 2019 Cal-Am Advice Letter No. 1231 to the CPUC.

²⁶³ See Exhibit 28 – May 9, 2020 Cal-Am Letter to Monterey One Water, p. 5.

erosion or sea-level rise, until near 2120. Two of the seven wells could be affected by sand burial by windblown sand prior to 2040, but these impacts will be avoided by implementation of Special Condition 8.²⁶⁴ Accordingly, the proposed well site locations, as conditioned, would allow the wells to avoid coastal hazards during their expected operating life.

- **Water rights:** ~~There are at least two~~ Certain comments have asserted that there are uncertainties associated with water rights ~~issues. First, Cal-Am has not yet established for the Cal-Am Project. However, multiple agencies have confirmed that Cal-Am may develop~~ appropriate rights to source water for ~~the groundwater that its project would withdraw, and it is not clear how long that process and any accompanying litigation might take or whether Cal-Am will be successful.~~ No permit is required by the State Water Board to acquire or use appropriate groundwater rights, but Cal-Am will have an ongoing burden to demonstrate that its withdrawal and use of fresh water (i.e., non-seawater) will not harm or cause injury to any other legal user of water. As part of its review of ~~Cal-Am's~~ Cal-Am's Project, the CPUC asked the State Water Board whether ~~Cal-Am~~ Cal-Am has a credible legal claim to extract feed water for the proposed desalination plant. The State Water Board issued an opinion stating, in relevant part, that:

to appropriate groundwater from the Basin, the burden is on ~~Cal-Am~~ Cal-Am to show no injury to other users. Key factors will be the following: (1) how much fresh water Cal-Am is extracting as a proportion of the total pumped amount and how much desalinated seawater is thus available for export as developed water; (2) whether pumping affects the water table level in existing users' wells and whether Cal-Am can avoid injury that would otherwise result from any lowering of water levels through monetary compensation or paying for upgraded wells; (3) whether pumping affects water quality to users' wells within the capture zone and whether Cal-Am can avoid or compensate for water quality impacts. (4) how Cal Am should return any fresh water it extracts to the Basin to prevent injury to others; and (5) how groundwater rights might be affected in the future if the proportion of fresh and seawater changes, both in the larger Basin area and the immediate area around Cal-Am's wells.

~~Cal-Am has entered a return water agreement that addresses item (4), though, as described in Section II.J of these Findings, Cal-Am may be required to return significantly more water to the Basin than anticipated during development of this agreement and as anticipated in the Final EIR/EIS. Additionally, many of the other questions and issues above cannot be answered or dealt with until pumping actually begins and continues for a period of time.~~ The State Water Board concluded that "[i]f overlying groundwater users are protected from injury, appropriation of water consistent with the principles discussed in this report may be possible." ~~However, it~~ The State Water Board also made a variety of recommendations for what sort of monitoring and other measures would need to be undertaken to ensure that other users were not

²⁶⁴ See Section IV.H, *supra*.

injured. The CPUC ~~determined that, although it is “not the arbiter of whether Cal-Am possesses water rights for the project,” these water rights issues did not raise significant enough questions about the project’s viability to warrant finding that the project was infeasible.~~¹⁴⁴ ~~Because these rights are not known, cannot be known until after pumping occurs, and involve issues that have been highly contentious in the area, there is the possibility that they could cause Cal-Am’s Project to be further delayed or, if it is built, to incur additional costs—potentially significant costs (see Section II.J describing the possible need for Cal-Am to return greater percentages of water to Castroville).~~ thereafter confirmed that the State Water Board, the agency charged with primary responsibility for regulating state water resources, had determined that Cal-Am could develop all necessary water rights to develop and operate the desalination facility. As such, there is no ongoing uncertainty related to Cal-Am’s right to source water for the Project.

~~Additionally, the City of Marina has filed litigation against CEMEX for allowing Cal-Am to obtain an easement at the site that is meant to allow an export of more than 15,000 acre-feet of groundwater away from the site each year. The City contends that a 1996 agreement with CEMEX limited water use at the site to no more than 500 acre-feet per year.~~

- **Effects on wetlands and vernal ponds:** As described in Section ~~III~~IV.G of these Findings, recent ~~hydrogeological monitoring conducted by the Commission’s independent hydrogeologist shows that~~ reports are inconclusive regarding whether Cal-Am’s proposed well field operations could result in a groundwater drawdown ~~of about two to four feet beneath nearby vernal ponds and lesser drawdowns in other, slightly more distant vernal pools and wetlands. The closest wetland/vernal pond areas are about 1,000 feet at their closest from the well field and cover about 80 acres, with other groups of wetland/vernal ponds somewhat more distant. The modeling conducted during the project’s CEQA review did not evaluate the effects of these drawdowns on the wetlands/vernal ponds, as it was believed at the time that these landscape features were hydraulically isolated from the underlying groundwater. However, there are currently no data available to confirm whether there is a connection and whether these areas would be affected. If they are connected to groundwater, this could result in an additional and as-of-yet unevaluated and unmitigated impacts to up to several acres of wetlands/vernal ponds that would adversely affect the function and values of vernal ponds and wetlands. Accordingly, Special Condition 7 requires Cal-Am to implement an Adaptive Management Program which would monitor the vernal ponds to determine first, whether they are groundwater dependent, and if so, what changes might be associated with any pumping-related drawdowns. If the additional analysis determines that there would be impacts from pumping-related drawdowns, Special Condition 7 requires Cal-Am to implement a Wetland Resiliency, Enhancement, Restoration, and Monitoring Plan to mitigate for potential impacts to the vernal ponds at specified ratios.~~

¹⁴⁴ ~~The CPUC’s EIR stated: “The CPUC is not the arbiter of whether CalAm possesses water rights for the project and nothing in this EIR/EIS should be construed as the CPUC’s opinion regarding such rights, except to the extent that the CPUC must determine whether there is a sufficient degree of likelihood that CalAm will possess legal rights to pump and desalinate the source water that would supply the desalination plant such that the proposed project can be deemed to be feasible.”~~

- Lack of water distribution pipeline:** Cal-Am's proposed Project is slated to rely on delivering water to its service area using a pipeline it shares with MCWD. MCWD has informed Cal-Am that the pipeline does not provide sufficient capacity for Cal-Am's proposed use. Cal-Am disputes this claim, ~~though asserts~~ arguing that there is in fact excess capacity in the shared pipeline for Cal-Am's use, and noting that its existing agreements permit it to use the shared pipeline for desalinated product water. However, Cal-Am has also noted that, if needed, it could construct another pipeline parallel to that shared pipeline, in order to convey project water. ~~Without one of these options, Cal-Am would not be able to deliver water to its customers. As noted above, in July 2020, the MPWMD chose not to make the necessary approval for Cal-Am to construct that~~ Potential approvals for this parallel pipeline, ~~though it could revisit that decision at any point in the future if it chose to do so. will be considered by the MPWMD Board in October. Given more than one available option, there do not appear to be significant barriers to Cal-Am's project related to its need for a desalinated water distribution pipeline.~~
- Lack of required outfall liner:** One of the adverse impacts identified in Cal-Am's Final EIR/EIS was corrosion of the proposed outfall due to the brine discharge from the desalination facility. The Final EIR/EIS included a mitigation measure that required ~~Cal-Am~~ Cal-Am to install an outfall liner before discharging from its facility, and although that liner was not fully designed at the time of the CEQA review, the CPUC analyzed several reasonably foreseeable impacts of installing the liner and imposed conditions to minimize such impacts. ~~It anticipated additional impacts to ESHA due to the anticipated need to cause ground disturbance along the outfall route while installing the liner, and noted that installation would have to occur during the outfall's low-flow period in the summer when most of its discharges are treated and rerouted to be used for agricultural irrigation; however, work in the summer would likely involve work on the beach within critical habitat for the Western snowy plover during its breeding and nesting period. Rather than applying for a permit to install the liner along with its desalination project, Cal-Am has stated that the owner of the outfall, Monterey One Water, will separately apply for the necessary permits once the liner has been designed, and that any potential impacts would be evaluated at that time. At this point, there is no approved design in place and it is unknown what additional environmental review and permits would be needed to install a liner. It is reasonably likely that Cal-Am would need to apply for a CDP for this work from the City of Marina. to a less than significant level. Moreover, as described in Section IV.F, on August 18, 2020, the Commission received a letter from Cal-Am describing an updated liner installation method that would be done almost entirely within the outfall and would involve no ground disturbance within the coastal zone of the City or the County. As discussed in Section IV.F, because there is a less impactful feasible alternative, Special Condition 4 requires Cal-Am to implement the proposed spray-lining method prior to the commencement of Project operations or to obtain an amendment to this CDP or a new CDP should Cal-Am need to implement a different method to install the outfall liner. Because Special Condition 4 guarantees there will be no adverse impacts to ESHA caused by the installation of the outfall liner, this future Project component does not raise significant concerns regarding project certainty.~~

~~In early August 2020, Cal-Am submitted new information about a possible “spray-on” method to install the liner without any ground disturbance within the coastal zone, which may obviate the need for the work to require a CDP. However, the outfall owner, Monterey One Water, has not yet evaluated this proposed spray-on liner to determine whether it would be feasible and would provide sufficient protection. Uncertainty about how the required liner is to be installed could lead to at least one substantial impact, as both of the two currently proposed installation methods would have to occur during the outfall’s low-flow period in the summer, when most of the discharges normally routed through the outfall are rerouted after treatment to be used for agricultural irrigation. However, any installation in the summer that requires work on the beach would adversely affect critical habitat for the Western snowy plover during its breeding and nesting period. It is uncertain at this time whether Cal-Am could avoid impacts to the plover or would need to obtain approval from the U.S. Fish and Wildlife Service to allow “take” of a listed threatened or endangered species. It also appears that the spray-on method would take somewhat longer to install – from eight to 12 weeks – which may exceed the amount of time the outfall is available for the proposed work.~~

As noted above, the Project Final EIR/EIS also considered smaller alternative desalination facilities to meet Cal-Am’s needs. Based on the modular nature of desalination treatment trains, with each train able to treat about 1.6 mgd, there was brief consideration of a 4.8 mgd and a 3.2 mgd facility; however, those options would likely have been more costly per unit of water produced because they would require much of the same infrastructure and capital construction, but would produce much less water. They would also share many of the same concerns as ~~Cal-Am’s~~ Cal-Am’s currently proposed 6.4 mgd facility — e.g., ~~the lack of a distribution pipeline, the lack of the needed outfall liner, and smaller, but similar concerns about impacts to wetlands. There would also be similar impacts to ESHA, though the area of impacts on the dunes would be slightly smaller because one or more wells would not need to be drilled.~~ Overall, the Commission did not consider this alternative in depth because its environmental impacts were not significantly less than the Project’s impacts.

“No Action” Alternative

The existing water supply situation is discussed above and elsewhere in this report, and this analysis relies on that discussion. The purpose of describing the “no action” alternative is to allow decision makers to compare the impacts of approving a proposed Project with the impacts of not approving it. Here, if the Commission denies the proposed desalination project, Cal-Am will need to pursue other options to obtain alternative water supplies. Over the past decade or two, other water supply projects have been considered – for example, new desalination facilities elsewhere in Monterey County. Those other desalination facilities have proposed to use open water ~~intakes~~ intake and could also affect areas of ESHA, thereby potentially causing greater adverse impacts than Cal-Am’s proposed Project. However, none of those proposals could meet the deadline imposed by the State Water Board’s cease-and-desist order, and Cal-Am is therefore not likely to pursue them, at least in the foreseeable future.

If the Commission does not approve this ~~project~~ Project, the most likely scenario is that Cal-Am will pursue the Pure Water Expansion. The PUC acknowledged this possibility in its 2017 Decision when it stated that it would consider an application for the Pure Water Expansion if the “desalination plant authorized in this decision (i.e., 6.4 mgd) is delayed to the point that sufficient source water capacity is more likely than not to be unavailable after the December 31, 2021, deadline set by the State Water Resources Control Board.” Given that the design and environmental review for the Pure Water Expansion is already well underway, it appears as

though is the only other water supply project that could be ~~ready to allow Cal-Am~~ developed in the near future – though not in time to meet the State Water Board’s cease-and-desist order. Therefore, what is most reasonably expected to occur in the foreseeable future if Cal-Am’s Project is not approved is that Cal-Am will pursue the Pure Water Expansion. ~~As described above, the Pure Water Expansion would have fewer impacts on coastal resources than the proposed Project.~~

The no action alternative is not feasible for the same reasons the Pure Water Expansion is not feasible. As explained above, if the Project is not approved, Cal-Am will not have an adequate water supply project in place by December 2021 to meet its obligation under the State Water Board’s CDO to reduce its withdrawals from the Carmel River to no more than its legal limit. It is possible that Cal-Am would seek an extension to allow completion of its desalination facility or of Pure Water Expansion if needed, though approval of such an extension by the State Water Board is uncertain. Any extension could lead to continued excessive water withdrawals from the Carmel River and pumping from the Basin until the new project was ready. In the interim, the Monterey Peninsula will be left in a perpetual water supply deficit with available supplies unable to meet demand. This would result in further adverse effects in the Carmel River ecosystem and specifically to the steelhead that are listed as threatened. Further, overdraft from the Basin would likely occur, which has the potential to result in greater seawater intrusion, which the Project would have helped to prevent.²⁶⁵ Such potential environmental effects are least likely to occur if the Cal-Am Project moves forward.

~~As the analysis above shows, the Pure Water Expansion should provide adequate water supply for Cal-Am’s service area for several decades. However, if Cal-Am determines that it needs additional supply during or after that time period, or if the Pure Water Expansion falls short of its expected production volumes, it may seek~~ Thus, if the Commission selected the no action alternative, Cal-Am may be required to develop ~~such~~ other water supplies to comply with the CDO. These could include ~~any of several~~ other possible water supply projects, including some considered by the CPUC in its Alternatives Analysis, but dismissed because they were then considered speculative, were not far enough along in design and planning, or were constrained by then-unresolved technical or environmental issues – for example, other desalination facilities that have been considered for the region, alternative slant well locations, etc. Presumably, Cal-Am could seek approval for some amount of additional legal rights to pump water from the Carmel River, though likely at a lower volume than its past overpumping. There may also be other alternatives available within the upcoming 20 to 25 year time frame considered in these Findings – for example, extraction wells being considered by the Salinas Valley Basin Groundwater Sustainability Agency to reduce the rate of seawater intrusion may provide a source of water for a desalination or water recycling facility.

Whether and when any such projects might be proposed, whether they would be approved by the ~~PUC~~ CPUC and other agencies, and what impacts those supply projects might have on coastal resources, is speculative at this time. If Cal-Am did not pursue any of these other alternatives, then it would possibly continue overpumping the Carmel River and the Basin, which would cause the ongoing, adverse impacts ~~to the river, its population of steelhead, and other wildlife~~ described above.

Conclusion

²⁶⁵ October 4, 2019, Seaside Basin Watermaster letter to Coastal Commission, p. 1.

Based on the above, the Commission finds that there ~~is a~~no feasible and less environmentally damaging alternative that would meet all or most of the proposed Project's objectives in a timely manner.

EXHIBIT C

ATTACHMENT B

RESPONSE TO AUGUST 25, 2020 STAFF REPORT FOR APPLICATION 9-19-0918 AND APPEAL A-3-MRA-19-0034

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- The Staff Report points to existing industrial facilities *outside of the coastal zone*, located *near* the City of Marina as evidence that Marina is overburdened with cumulative impacts from industrial facilities. (Staff Report, p. 100.)
 - First, staff’s evaluation of the Project’s potential environmental justice impacts outside of the Coastal Zone exceeds the Commission’s jurisdiction. (See *Sierra Club v. Cal. Coastal Com.*, 35 Cal.4th 839, 851-52.)
 - Second, as stated above, much of the industrial development is not, in fact, within city limits – it is *near* Marina. Figure 1 of the Staff Report shows that, although Marina is near a regional landfill, regional composting facility, and regional sewage plant, this industrial development is outside of Marina’s boundaries. (See Staff Report, p. 100; see also Applicant’s Staff Report, Section IV.N.) Further, although Fort Ord is a contaminated site, Marina is actively working to develop the area with housing. (See Applicant’s Staff Report, Section IV.N.) Even so, the Project’s *de minimis* presence would not contribute to cumulative impacts on Marina. (See Section G, *supra*.) The majority of the Project’s footprint and the physical desalination facility will be located outside of Marina.
- The Staff Report states that Marina residents “are concerned about the potential impacts of the proposed slant wells on their own aquifer and groundwater supply.” (Staff Report, p. 101.)
 - As explained above, the Commission’s independent hydrogeologist, the Final EIR/EIS, the HWG, and the State Water Board all agree that the Project will not adversely impact groundwater or Marina’s municipal supply wells. (See Staff Report, p. 68; Applicant’s Staff Report, Section IV.J; Section E, *supra*.)
 - Further, as described above and throughout the Applicant’s Staff Report, the Project will provide benefits to both the SVGB and Seaside Groundwater Basin. (Applicant’s Staff Report, Sections IV.J, IV.N, IV.P.) The Project will help prevent further seawater intrusion in the SVGB and will protect groundwater levels in the Seaside Basin, thereby preventing seawater intrusion and the irreversible loss of groundwater storage.
- The Staff Report again claims that the PWM Expansion is a feasible alternative that would “avoid all the above-referenced impacts” and result in a “significantly lower rate increase.” (Staff Report, p. 101.) For the reasons discussed above and in Section [Alts], staff is wrong that the PWM Expansion represents a feasible alternative, would avoid its own significant impacts, or would result in a significantly lower rate increase. Particularly with implementation of Special Condition 13, low income customers in Cal-Am’s service territory will bear little to no costs from the rate increases associated with the Project.

J. Assessment of Alternatives (Staff Report, pp. 102-146)

1. Interpretation of Coastal Act Sections 30233 and 30260

- The Staff Report asserts that Coastal Act section 30233 permits the Commission to analyze Project alternatives because the concrete anchors attached to the Project’s temporary monitoring buoys, and the retrofit of the M1W outfall, constitute “fill.” (Staff Report, pp. 103, 107.)
 - Staff provides no support for the argument that work on the existing M1W outfall would involve “fill.” Resources Code section 30108.2 defines “fill” as “earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.” As discussed in Section D, *supra*, no “fill” is involved in the Project construction. Therefore, Coastal Act section 30233 does not apply. Additionally, even if certain components did constitute “fill”—which they do not—the Commission’s authority would be limited to review of alternatives as to those components, not wholesale alternatives to the entire Project. (June 30, 2020 Letter to Commission, Att. A, p. 46.)
- The Staff Report next claims that under the first test of Coastal Act section 30260, the Commission may consider the PWM Expansion project as an alternative. (Staff Report, pp. 103, 107.)
 - As stated in Cal-Am’s June 30 Letter to the Commission, pp. 46-47, this position ignores the plain language of section 30260, which explicitly applies only to alternative “locations,” not entirely separate projects. (See Pub. Resources Code, § 30260.) Although the Commission has previously interpreted section 30260 to allow consideration of a wide variety of different alternatives, including alternative technologies and methods for accomplishing a project’s objectives, it has not previously interpreted section 30260 to allow consideration of wholly separate alternative projects. (See, e.g., Staff Report for Test Slant Well, App. No. 9-14-1735, A-3-MRA-14-0050, pp. 3, 57 [evaluating on- and off-site alternative locations for the test slant well].) Further, prior instances of nuclear storage projects in which the Commission considered out-of-state alternatives are not binding precedent on this proposed Project or other Commission actions.
- Staff also claims that the Commission may consider Project alternatives outside of the Coastal Zone, even though it is only a responsible agency under Public Resources Code section 21080.5(d)(2)(A). (Staff Report, pp. 103, 107-108.) The Commission’s authority as a responsible agency is limited. (See, e.g., Pub. Res. Code, § 21002.1, subd. (d); Cal. Code Regs., Tit. 14, Div. 6, Ch. 3 (“CEQA Guidelines”), §§ 15042, 15096, subd. (g)(1) [“When considering alternatives and mitigation measures, a responsible agency is more limited than a lead agency. A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve.”]; see also June 30 Letter to the Commission [listing cases].)
- Lastly, the Staff Report argues that the Commission’s public trust doctrine obligations require it to assess whether “there is an alternative project that would protect the public

trust resources in the Carmel River and that would not involve as many impacts to coastal and public trust resources as this proposed Project.” (Staff Report, pp. 104-105.)

- Under the public trust doctrine, state agencies have “an affirmative duty to take the public trust into account in the planning and allocation of [trust] resources, and to protect public trust uses whenever feasible.” (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446.) However, there is no “procedural matrix” by which an agency must abide in carrying out a public trust determination, and there is no requirement that an agency conduct a separate public trust analysis, as staff did here. (*Citizens for East Shore Parks v. State Lands Com.* (2011) 202 Cal.App.4th 549, 576, 578.)
- The Project does not harm public trust resources. Cal-Am agrees with the Staff Report that the Project “would entail the use of seawater, a public trust resource, in a manner that would not harm that particular resource,” “will not take up space on, or affect, tidelands that provide public access”, “protects marine water and wildlife public trust resources,” and “would end the withdrawal of water from the [Carmel] River.” (Staff Report, p. 105.) However, contrary to Staff’s contention, as discussed in Section A, the proposed Project also has in place satisfactory measures to mitigate any potential adverse effects construction may have on sensitive species and their habitat.
- As described in this section and in Section K, there is no feasible alternative project that better protects public trust resources. (See Section K, *infra*; Applicant’s Staff Report, Section IV.P.).

2. The PWM Expansion is Not A Feasible Alternative

- The Staff Report purports to analyze the PWM Expansion as an alternative to the Project under the “feasibility” criteria set forth under Coastal Act section 30108. (Staff Report, pp. 109-115.) Contrary to staff’s claims, when assessed pursuant to the section 30108 criteria, the PWM Expansion is plainly infeasible as an alternative to the Project. (See Applicant’s Staff Report, section IV.O.1; see also June 30 Letter to Commission, Att. A, Section I.2.)

a. “Capable of Being Accomplished in a Successful Manner”

- Staff argues that the PWM Expansion would use the same proven technology as Phase I PWM, and that the problems faced by Phase I at startup are common for water treatment projects and are being readily resolved. (Staff Report, p. 110.)
 - The Staff Report ignores the fact that M1W has ceased all work on the PWM Expansion and also fails to acknowledge the myriad technological/operational issues with the Phase I PWM and the PWM Expansion that will prevent the projects from being completed in a successful manner or within a reasonable period of time. (See Applicant’s Staff Report, Section IV.O.1.) Given that the PWM Expansion has now been delayed indefinitely and would not meet even the

low demand scenario promoted by MPWMD, it can no longer be considered a feasible alternative to the Project.

- Staff fails to acknowledge that the PWM Expansion is no longer moving forward. (See Applicant's Staff Report, Section IV.O.1; see also June 30, 2020 Cal-Am Letter to Commission, pp. 47-48.) On April 27, 2020, the M1W Board denied certification of the Final SEIR for the PWM Expansion. (See May 20, 2020 M1W Board of Directors Staff Report.) In doing so, the M1W Board acknowledged that significant flaws remain unaddressed in the Final SEIR related to its analysis of PWM Expansion source water, water supply and demand, impacts to agricultural water supplies, and the SEIR's failure to evaluate the PWM Expansion as either an alternative to or a cumulative project with the Project. (*Id.*, p. 2; August 12, 2020 Cal-Am Letter to Commission.) M1W has stated that it does not possess the funding to remedy the significant deficiencies in the PWM Expansion SEIR, and therefore has ceased all work on the Expansion. (See May 20, 2020 M1W Board of Directors Staff Report, p. 1.)
- Phase I PWM continues to face significant technical and operational barriers, and given that it will use the same technology as Phase I PWM, there is no reason to believe that the proposed PWM Expansion will not encounter similar hurdles. (See Applicant's Staff Report, Section IV.O.1; June 30 Letter to Commission, Att. A, pp. 49-50.)
 - M1W is experiencing ongoing difficulties in achieving treated water injection rates originally promised for the Phase I PWM, and currently estimates that it is capable of an annual injection rate of 2,030 afy – less than 58% of the 3,500 afy it has contractually promised to Cal-Am. (Applicant's Staff Report, Section IV.O.1.)
 - In an attempt to address these technical barriers, M1W has proposed a series of costly fixes, including repairs to the shallow wells, final commissioning of the deep wells, and construction of a third, and possibly a fourth, deep injection well. (August 12, 2020 Cal-Am Letter to Commission, p. 2; August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10, available at <https://montereyonewater.org/290/Audio-Recordings-of-Board-Meetings>.) These attempted remedies will increase Phase I PWM costs by \$13 million, with no guarantee that they will allow M1W to provide Cal-Am with its promised allocation of PWM water. It should be noted that in order to achieve the lowest demand estimate of 10,855 afy set forth in the Stoldt Memo, M1W must produce 100 percent of the promised water supply from the Phase I PWM, as well as 100 percent of the promised supply from the PWM Expansion—even with the proposed fixes the evidence demonstrates that such assumptions are unrealistic. (See Section J.3, *infra*.) These measures will also cause further delay in the Phase I PWM—for example, M1W does not intend to begin construction on the third deep well until November 2020, and it is

speculative to assume that all of its technical issues could be resolved by the December 31, 2021 CDO deadline. (*Ibid.*)

- Phase I PWM has not utilized certain source waters, including agricultural wash water, since startup. (August 12, 2020 Cal-Am Letter to Commission, p. 2.) It is not clear that PWM treatment technologies will be capable of treating these untested source waters to safe levels.
- Staff does not consider adequately the uncertainty regarding disputed water rights for the PWM projects. As discussed in the Applicant’s Staff Report, the Amended and Restated Water Recycling Agreement (“ARWRA”) between M1W and MCWRA contains multiple requirements and conditions regarding the construction, operation, and financing of new source water for the PWM projects. The conditions to the ARWRA have yet to be satisfied, thus the reliability ARWRA source waters, even for Phase 1 PWM, is speculative due to this ongoing dispute. Likewise, the City of Salinas disputes the PWM Expansion’s use of agricultural wash from the City. (Applicant’s Staff Report, Section IV.O.1.) Because these issues are currently being disputed, Staff is incorrect in determining that the Phase 1 PWM issues will be easily resolved.
- Staff rebuts the argument that PWM Expansion source waters are unsecured, pointing to the Final SEIR and M1W’s August 20, 2020 letter. (Staff Report, pp. 110-111.)
 - As described in Section J.3, *infra*, recent data regarding wastewater treatment plant (“WWTP”) and Reclamation Ditch flows demonstrates that under both normal and dry water years, there will be insufficient source waters to supply the Phase I PWM and the PWM Expansion.

b. “Within a Reasonable Period of Time”

- The Staff Report claims that the Project would take 27 months to construct and begin operations once all final approvals are received, while the PWM Expansion would take 24 to 27 months. Confusingly, staff then claims that if each project began construction today, the Project would begin providing water by early 2024, while the PWM Expansion could provide water by late 2022. (Staff Report, p. 111.) This contradicts staff’s statement that both projects could be completed in about the same amount of time. Staff also argues that the primary remaining barriers for the PWM Expansion are: (1) certification of the Final SEIR and (2) approval of a new Water Purchase Agreement (“WPA”), which staff claims Cal-Am could pursue expeditiously if it chose to do so. (Staff Report, pp. 111-112.)
 - Even assuming that the M1W Board was ready to approve the PWM Expansion, which it is not (see Section J.2.a, *supra*), the approval of the PWM Expansion will be further delayed by the need to recirculate the SEIR for that project. Under CEQA, when “significant new information” is added to an EIR after the public notice and comment period, but before certification of the EIR, the lead agency must provide notice of an additional public comment period before certifying the

EIR. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; *Save Our Peninsula Committee*, 87 Cal.App.4th 99, 130.)

Appendix I to the PWM Expansion Final SEIR does not consider post-2013 WWTP flow data, which demonstrates a consistent trend of decreasing WWTP flow to source the PWM Expansion, despite the fact that M1W apparently possessed this data when preparing the Final SEIR. (See August 23, 2020 Hazen Memo, p. 4; see Applicant's Staff Report, Section IV.O.1.) Accordingly, overall demand for the source waters listed for the PWM Expansion far exceeds available supplies in both Normal/Wet years and Dry years. (August 23, 2020 Hazen Memo, p. 6.) This newly released post-2013 WWTP flow data constitutes significant new information under CEQA because M1W will be required to identify new, secure water sources for the Expansion for it to be feasible. Further, the absence of the post-2013 WWTP flow data that M1W had in its possession from the Final SEIR created a CEQA document "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (See CEQA Guidelines, § 15088.5, subd. (a)(4).) As a result, the Final SEIR will need to be revised and recirculated for public comment.

M1W also has proposed the potential construction of additional deep wells in an attempt to address injection refusal issues. (August 12, 2020 Cal-Am Letter to Commission, p. 2; August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10, available at <https://montereyonewater.org/290/Audio-Recordings-of-Board-Meetings>.) Initially, M1W anticipated constructing a third deep well, but is now discussing a fourth. (*Id.*) The decision to add these additional deep wells would also constitute significant information regarding the PWM Expansion's impacts, triggering a requirement for M1W to recirculate the Final SEIR for the PWM Expansion for additional notice and comment. (CEQA Guidelines, § 15088.5, subd. (a); *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1129.) As drafted, the PWM Expansion Final SEIR assumes that five deep injection wells would be constructed for both Pure Water projects in total: two deep injection wells for the Phase I PWM, two deep injection wells for the PWM Expansion at sites that would be relocated from those planned for the Phase I PWM, and one additional deep injection well for the PWM Expansion, for a total of three deep injection wells for the PWM Expansion. (See PWM Expansion Draft SEIR, p. 2-22.) Should M1W be required to construct a total of four deep injection wells solely for the Phase I PWM, it is likely that it would need to construct three deep injection wells for the PWM Expansion, for a total of seven wells. Even if only one additional deep injection well is constructed for the Phase I PWM, that would result in one more deep well than was analyzed in the PWM Expansion SEIR. As the Final SEIR has not assessed the impacts of constructing these additional wells, M1W would be required to revise and recirculate the Final SEIR to provide for public notice and comment regarding these additional impacts. (See Applicant's Staff Report, Section IV.O.1; Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5, subd. (a)(1).)

This entire recirculation process could add an additional six to twelve months to the PWM Expansion project's timeline—further demonstrating that the PWM Expansion is not a feasible alternative.

- Delivery of water from the PWM Expansion also will be delayed by the need for the CPUC to approve a WPA between M1W and Cal-Am for PWM Expansion water. As acknowledged by the PWM Expansion Final SEIR, such a WPA is needed to secure funding to construct the Expansion and thus, “[w]ithout knowing when or whether a [WPA] will be negotiated, it is currently not possible to estimate when the [PWM Expansion] would be completed.” (See PWM Expansion Final SEIR, p. 3-35.) Any WPA for the PWM Expansion would be required to incorporate additional terms beyond those included in the WPA for Phase I PWM water to provide adequate assurances to Cal-Am and its customers that the PWM Expansion water will be delivered as promised, and enhanced protections in the event that the Expansion is incapable of providing adequate supplies. (See Applicant's Staff Report, Section IV.O.1; see also June 30 Letter to Commission, Att. A, p. 72.) Such performance guarantees must include a guarantee of the full production volume of PWM Expansion product water, and a full indemnification to Cal-Am against any risk, liability, or penalties should the PWM Expansion fail to provide an adequate water supply to meet the needs of Cal-Am's customers. (See Applicant's Staff Report, Section IV.O.1; see also May 9, 2020 Cal-Am Letter to M1W, p. 5.)
- As discussed by the State Water Board, the timeline for implementation of the PWM Expansion has been delayed beyond the December 31, 2021 CDO deadline, and the Expansion requires “approvals and funding for which the details are uncertain and the timeline is indefinite”—as such, “[i]t is uncertain whether or when the proposed [PWM Expansion] may proceed beyond its currently pending environmental review . . .” (See May 8, 2020 State Water Board Letter to Coastal Commission, pp. 4-5.) As such, it is unlikely that the PWM Expansion could be constructed and operational within a reasonable period of time as compared to the Project. (See Applicant's Staff Report, Section IV.O.1.)
- The Staff Report argues that Cal-Am must, for its part: (1) design and obtain permits to install an outfall liner; (2) obtain approvals to either use MCWD's pipeline or construct a new parallel delivery pipeline; and (3) overcome ongoing litigation with the City of Marina and MCWD, all of which the Staff Report claims will delay Project implementation. (Staff Report, pp. 112-113.)
 - None of the matters raised by the Staff Report here present the likelihood of significantly delaying the Project.
 - First, as described in an August 17, 2020 letter to the Commission, Cal-Am now proposes to install a liner to the existing M1W outfall from within the outfall itself via a spray-on method. (See August 17, 2020 Cal-Am Letter to Commission; see also Applicant's Staff Report, Section IV.O.5; Section A.4, *supra*.) As the spray-on liner would be installed entirely from within the outfall, and because the outfall

pipe would be accessed from points outside of the coastal zone, installation would not involve any ground disturbance within the coastal zone, and therefore would not require that Cal-Am obtain a CDP for the work. (See August 17, 2020 Cal-Am Letter to Commission, p. 3.) Cal-Am has proposed a Special Condition to ensure that this less impactful, feasible alternative approach to the outfall liner is pursued. (See Applicant’s Staff Report, Special Condition 4.) As such, installation of the outfall liner will not cause any delay in Project implementation.

- Second, existing agreements already permit Cal-Am to utilize the pipeline shared with MCWD to convey Project water, and there remains sufficient excess capacity in the pipeline to accommodate Project water. (June 30 Letter to Commission, Att. A, pp. 54-55.) As acknowledged by the Staff Report, in the event that MCWD continues to unreasonably refuse to permit Cal-Am to exercise its right to utilize the pipeline, Cal-Am has proposed to construct an additional product water conveyance pipeline, running parallel to the shared pipeline. Approvals for this proposed parallel pipeline will come before MPWMD at its October Board meeting. (See July 31, 2020 MPWMD Board of Directors Final Minutes, p. 1.) Therefore, Cal-Am’s ability to utilize the shared pipeline, or to obtain approvals for a new parallel pipeline, are not anticipated to cause any substantial delay in the Project’s schedule.
- Third, with respect to the litigation initiated by the City of Marina, and in which MCWD has filed a cross-complaint, Cal-Am believes the claims in that case are meritless, and has demurred to MCWD’s cross-complaint. (See Applicant’s Staff Report, Section IV.O.1.) Further, the CPUC has declared that with respect to brackish groundwater to be extracted by the Project, Cal-Am may develop appropriate groundwater rights if the Project extracts otherwise unusable groundwater without harm to existing users, and Cal-Am thereafter returns any fresh water to the Basin—that framework cannot be modified through this litigation. (*Ibid.*) Moreover, the temporary stay currently in place as a result of MCWD’s litigation with the County of Monterey is expected to be lifted following the Commission’s decision on the Project. (*Ibid.*) As such, it is unlikely that the litigation initiated by Project opponents will cause significant delay in Project implementation.

c. “Taking into account economic, environmental, social, and technological factors”

- **Economic**—Staff argues that Project water would cost \$6,000 to \$8,000 per acre-foot, while PWM Expansion water would cost about \$2,300 per acre-foot. (Staff Report, pp. 113-114.)
 - The Staff Report’s acre-foot cost comparisons are not relevant to potential rate increases on Cal-Am’s customers. As stated in the Applicant’s Staff Report, based on available information the CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single family residence for the desalination facility, and that increase is not tied to per acre foot water

costs. (See Applicant’s Staff Report, Section IV.O.1.) The CPUC’s rate increase was based on a calculation of the annual revenue required to repay capital costs to build the facility, including set financing repayment requirements, and the annual operations and maintenance. The amount of water the facility produces is not a material variable in rates that customers are charged, except for minor, incremental operating and maintenance costs. Thus, regardless of the amount of water produced each year, the amount needed to be recovered annually from customers for physical construction and operation of the facility and for financing/loans essentially remains the same. (*Ibid.*) That is why the CPUC found that approving a smaller 4.8 MGD desalination facility would not result in any “significant, if any, cost savings to ratepayers” and determined that alternative was not feasible. (CPUC Decision 18-09-017, p. 129.)

- Further, projections of ***PWM Expansion water costs are entirely speculative*** at this time, and given recent increases in Phase I PWM water costs, the projected costs for PWM Expansion water are likely to see similar increases. (See Applicant’s Staff Report, Section IV.O.1.) Given the above-discussed technological difficulties facing the Phase I PWM, M1W staff projects that at the current anticipated delivery rate of 2,030 afy, costs for Phase I PWM water may be as high as \$3,678 per acre-foot. (August 12, 2020 Cal-Am Letter to Commission, p. 3.) These costs are more than double the rate of \$1,720 per acre-foot approved by the CPUC for Phase I PWM water. (*Ibid.*) It is highly likely that the PWM Expansion would face similar cost hikes. Moreover, current cost projections for PWM Expansion water do not account for costs already expended on the Project, which are anticipated to be recovered via future water rate increases that would be expected to increase customer bills by approximately \$10 to \$20 per month even if the desalination facility is not built. (Applicant’s Staff Report, Section IV.O.1.) It is therefore both irresponsible and speculative to compare estimated PWM Expansion water costs to Project water costs at this time.
- **Environmental**—The Staff Report claims that the Project would result in significant adverse effects to ESHA, groundwater, and marine life, while the PWM Expansion would be built entirely outside the coastal zone and would have relatively few environmental impacts. (Staff Report, p. 114.)
 - The Staff Report mischaracterizes the extent of the Project’s environmental impacts. (See Applicant’s Staff Report, Section IV.O.1.) As described above, the Project would be consistent with the Coastal Act and City of Marina LCP policies regarding coastal waters with the implementation of Cal-Am’s proposed special conditions. (See Section D, *supra*; see also Applicant’s Staff Report, Section IV.J.) Further, even without the implementation of special conditions, the Project is entirely consistent with all policies regarding groundwater. (See Section E, *supra*; see also Applicant’s Staff Report, Section IV.J.) Finally, while the Project would be inconsistent with the Coastal Act and Marina LCP policies regarding ESHA, including wetland/vernal ponds EHSA, the Project would incorporate

mitigation measures to reduce impacts to ESHA to the maximum extent feasible. (See Section A, *supra*; see also Applicant's Staff Report, Section IV.F.)

- Further, there remains significant uncertainties regarding the PWM Expansion's environmental impacts. (See Applicant's Staff Report, Section IV.O.1.) The M1W Board has recognized that the PWM Expansion SEIR does not fully address a number of environmental issues, and therefore denied certification of the SEIR. (May 20, 2020 M1W Board of Directors Staff Report.)
- Finally, the Commission cannot purport to assess the PWM Expansion, which does indeed lie entirely outside the coastal zone, while simultaneously ignoring each and every one of the Expansion's environmental impacts. Staff cannot have it both ways—the Commission must either conduct a complete analysis of the PWM Expansion, including a thorough examination of *all* of the Expansion's impacts regardless of where they occur, or it must abandon its attempt to analyze and substitute an alternative for the Project where the alternative lies entirely outside the Commission's coastal zone jurisdiction.
- **Social**—The Staff Report asserts that the Project would have much greater environmental justice-related effects on low-income ratepayers and other communities of interest. (Staff Report, p. 114.)
 - As discussed in Section I, *supra*, Cal-Am offers rate assistance programs for low-income ratepayers, and, as required in proposed Special Condition 13, Cal-Am must implement additional ratepayer assistance programs to address potential barriers to access, customer outreach, and the need to offset any rate increases for low-income customers. (See Applicant's Staff Report, Section IV.O.1.) Moreover, Cal-Am will offer discounted Project water rates to Castroville, a disadvantaged community whose groundwater supply has diminished in recent decades due to overpumping. (*Ibid.*) Proposed Special Condition 13 will ensure that Cal-Am's low income customers will not be required to absorb the costs of providing this discounted water to Castroville residents. (*Ibid.*)
 - In contrast, the PWM is highly likely to cause a number of environmental justice-related impacts, which the Staff Report wholly ignores.
 - First, M1W currently proposes to use more than 3,700 afy in agricultural produce wash water generated by the City of Salinas in order to produce the 2,250 afy in treated water planned for the Expansion. However, Salinas disputes M1W's rights to use these agricultural wash waters, which the City argues is needed to "support farmers, ranchers, and the City's agricultural industry." (See Applicant's Staff Report, Section IV.O.1; January 29, 2020 City of Salinas Letter to M1W, pp. 1-2.)
 - Second, implementation of the PWM Expansion, without the Project, will not enable Cal-Am to provide an adequate water supply to meet even the lowest demand projections set forth in the Stoldt Memo. (See Applicant's

Staff Report, Section IV.O.2.) Without a sufficient water supply, there will be insufficient water available to construct affordable housing in Cal-Am's service area, which will force employees in the Monterey Peninsula service industry to continue residing in more affordable inland communities and contend with lengthy commutes to their jobs on the Peninsula. (*Id.*, Section IV.O.1.) These workers will then be forced to bear additional economic burdens, including costs spent on gasoline or other modes of transportation, in order to commute to the Peninsula, and reduced Coastal access opportunities. (*Ibid.*)

- Third, because WWTP flows that the PWM Expansion is projected to rely upon as source water are continuing to decline, in most situations there would be insufficient source waters to supply both the Expansion and the CSIP. (See Section J.2.a, *supra*; see also Applicant's Staff Report, Section IV.O.1.) Without adequate source water to supply the CSIP project, continued groundwater pumping resulting in seawater intrusion in the SVGB will continue to progress, disproportionately affecting the disadvantaged community of Castroville. (See Applicant's Staff Report, Section IV.O.1.)
- **Technological**—Staff acknowledges that the Project would utilize proven slant well technology, while claiming that the startup issues seen with Phase I PWM will be easily remedied. (Staff Report, pp. 114-115.)
 - Staff does not provide any evidence to back up its claims that the ongoing technological issues with the Phase I PWM, and by extension the PWM Expansion, can be readily corrected. (See Section J.2, *supra*.) M1W has proposed a series of fixes in an attempt to bring Phase I PWM production and injection rates up to planned capacity levels. (*Ibid.*) However, it is speculative at this time to assume that these repairs and additional measures will be effective.

3. Water Supply and Demand

- The Staff Report purports to evaluate the PWM Expansion under the criteria of the Coastal Act section 30108 definition of feasibility and concludes that the PWM Expansion is a feasible alternative to the Project. (Staff Report, p. 109.) Cal-Am and the Commission staff fundamentally disagree as to the feasibility of the PWM Expansion, the current and future water demand for the Cal-Am Monterey service area, and the availability of source water for the PWM Expansion.¹¹
 - As explained in Applicant's Staff Report, Cal-Am's desalination facility would provide a more reliable and drought resilient water supply than would the PWM

¹¹ In response to the Staff Report's claims regarding Monterey Peninsula supply and demand and PWM Expansion source water, Hazen and Sawyer prepared an additional report debunking the Staff Report's assertions (the "September 10, 2020 Hazen Memo"), attached to the Applicant's Staff Report as Exhibit 23.

Expansion. (Applicant’s Staff Report, Section IV.O.2.) When combined with Cal-Am’s other available water sources, and when considering the most restrictive projections of demand presented to the Commission by MPWMD, only Cal-Am’s Project is capable of providing an adequate water supply to meet the Peninsula’s current and future demands. Only the addition of the Project to Cal-Am’s water portfolio would allow Cal-Am to reduce its withdrawals from the Carmel River in accordance with requirements of the State Water Board’s CDO.

- As shown in Table 1 below, the Commission has been presented with conflicting estimates and projections of current and future water demand for the Peninsula. As explained in Applicant’s Staff Report, the Commission does not need to determine the validity of these competing demand projections because even when it is assumed that the lowest demand projections from MPWMD are accurate (10,855 afy), the PWM Expansion is not capable of and cannot be relied upon to satisfy that level of demand. (Applicant’s Staff Report, Section IV.O.2.)

Table 1: Comparison of existing and future demand scenarios

	2018 CPUC	MPWMD March 2020	MPWMD September 2019	MCWD	2019 Cal-Am Rate Case ¹²
Existing demand:	12,000	9,817 – 10,863	9,788 – 11,232	9,985	9,338 – 9,789 (to 2023)
Future demand:	~14,000 at an unspecified future date	10,884 – 12,287	10,855 – 12,656	10,412 – 10,983	NA

- **Additional Demand for Seaside Groundwater Basin.** The Seaside Groundwater Basin Watermaster also has concluded that in order to achieve protective water levels and prevent seawater intrusion, the Basin will require replenishment of an additional 1,000 afy over the next 25 years. (October 4, 2019 Seaside Groundwater Basin Watermaster Letter to Commission, p. 2.) Accordingly, each of the demand numbers presented above should be increased by 1,000 acre-feet. The Staff Report concedes that only the Project is capable of replenishing this additional water, however, claims without support that the Watermaster’s identification of this 1,000 afy demand is merely “speculative”

¹² The purpose of a rate case is to determine what rates are needed for the next three years to cover the expenses of operating and maintaining the water supply system. To do that, it must be determined what those expenses will be, and what revenue will be generated from customers. Since part of a customer’s bill is based on amount of water use, expected demand over the next three years is important to determine expected revenue. In projecting demand over the next three years, Cal Am used demand in 2019 for 2019-2022 based on the assumption that no growth would occur due to the moratorium. The issue of what supplies are needed to adequately and reliability provide water to meet customer demand at all times over decades to come is completely different. If a water system is sized only to meet average current demands, it will not have sufficient water to supply customers on the hottest summer days, in times of drought, or to accommodate growth.

since there is no contract in place to purchase the water. (See Staff Report, p. 120.) Notably, there are either no contracts in place or disputed contracts for numerous PWM Expansion source waters that Commission staff rely upon as part of staff's determination that sufficient source waters exist for the Expansion to be considered a feasible alternative. (See June 30 Letter to Commission, Att. A, pp. 50-51 [describing disputed ARWRA source waters and City of Salinas' agricultural produce wash water].) Despite staff's position on those source waters, somehow staff considers the Watermaster's determination to be speculative in the absence of a contract. (See June 30 Letter to Commission, Att. A, pp. 50-51 [describing disputed ARWRA source waters and City of Salinas' agricultural produce wash water].) Commission staff cannot have it both ways.

- *Sufficiency of Available Supplies to Meet Demand.* As explained in Hazen and Sawyer's August 11, August 23 and September 10, 2020 expert analysis submitted to the Commission, the analyses provided by proponents of the PWM Expansion fail to demonstrate that the Pure Expansion has reliable sources of water necessary to meet demand on the Monterey Peninsula, assuming 10,855 afy demand.

To conclusively demonstrate that the PWM Expansion is not a feasible alternative capable of meeting even a conservative estimate of demand, Appendix A in the September 10, 2020 Hazen Memo provides an updated accounting of Cal-Am's water supply portfolio, assuming operation of the PWM Expansion, but without the Project. Appendix A in the September 10, 2020 Hazen Memo controls for multiple Aquifer Storage and Recovery ("ASR") scenarios and surface water scenarios and demonstrates that the PWM Expansion cannot meet 10,855 afy demand. Hazen Appendix A is reproduced below.

September 10, 2020 Hazen Memo, Appendix A

Source / Assumption Scenario	Proposed by Others			ASR Controlled*			Wastewater & Reclamation Ditch Controlled*		
	CPUC	MPWMD 2020	MPWMD 2019	No ASR	Half ASR (650 AFY)	Full ASR (1,300 AFY)	Updated Table 9 – Normal Year building Reserve	Updated Table 10 – Normal Yr after full Reserve	Updated Table 11 – Dry Year
1. Carmel River	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376	3,376
2. Seaside Groundwater Basin	774	774	774	774	774	774	774	774	774
3. Aquifer Storage and Recovery	1,300	1,300	1,300	0	650	1,300	1,300	1,300	1,300
4. Sand City Desalination Facility	94	94	94	94	94	94	94	94	94
5. Pure Water Project	3,500	3,500	3,500	3,500	3,500	3,500	3,700	3,500	0
6. Pure Water Expansion	-	2,250	2,250	2,250	2,250	2,250	528	719	0
7. Other Available Supplies	-	300	406	-	-	-	-	-	-
Total without desalination Project	9,044	11,594	11,700	9,994	10,644	11,294	9,772	9,763	5,544
Surplus/Deficit assuming 10,855 afy demand	-1,811	739	845	-861	-211	439	-1083	-1,092	-5,311

* Figure 2 from the August 11, 2020 Hazen and Sawyer report depicts these alternative scenarios. (August 11, 2020 Hazen Memo, p. 19.)

The availability of the individual water supply sources included in Hazen Appendix A above are described in more detail in Applicant's Staff Report. (Applicant's Staff Report, Section IV.O.2.)

Specifically, as shown in Hazen Appendix A, Hazen concluded that ASR was incapable of consistently providing enough water supply to meet the 10,855 afy demand. (August 11, 2020, Hazen Memo, pp. 5-6.) In concluding the PWM Expansion can meet demand, MPWMD's General Manager unrealistically assumes that ASR will provide 1,300 afy of supply at all times and that no droughts will occur between now and 2034. As explained in Applicant's Staff Report, ***the assumption that ASR can reliably produce 1,300 afy on a consistent multi-year basis is unreasonable and speculative.*** (Applicant's Staff Report, Section IV.O.2.) First, as shown in the August 11, 2020 Hazen Memo, ASR using excess Carmel River water in the past 15 years has only achieved an output of 1,300 afy once and an input of 1,300 afy twice. (August 11, 2020 Hazen Memo, p. 5.) Second, during droughts, injection and recovery from ASR is essentially unavailable. (January 23, 2020 Hazen Memo, pp. 6-8; August 11, 2020 Hazen Memo, p. 5.) Third, ASR has proven to be incapable of building up a drought reserve to consistently deliver 1,300 afy. For the last 15 years, average annual storage of ASR is approximately 138 afy, and the last five years have seen an average of 352 afy. (August 11, 2020 Hazen Memo, p. 5.) Such amounts are insufficient storage to provide 1,300 afy over a multi-year drought. Hazen Appendix A accounts for the overall variability of ASR and shows that when realistic assumptions regarding ASR availability are made, there is an overall supply deficit ranging from -211 afy to -861 afy. Hazen found that this deficit will occur even when it is assumed that all other supplies will be fully available.

As explained in Applicant's Staff Report and as found by Hazen and Sawyer, wastewater and surface water flows are insufficient water sources for the Phase I PWM and the PWM Expansion to produce their promised supplies of 3,500 and 2,250 afy, respectively. (Applicant's Staff Report, Section IV.O.2; August 23, 2020 Hazen Memo, pp. 6-15.) Specifically, the PWM Expansion SEIR and analysis provided by PWM Expansion proponents did not evaluate wastewater flows beyond 2013 when considering if wastewater is a reliable water source. In response to the August 11, 2020 Hazen Memo demonstrating that wastewater flows declined significantly since 2013, M1W made wastewater flow information for 2014 to 2019 available to the Commission and the public for the first time on August 20, 2020. However, M1W's new flow information only confirmed that wastewater flow has declined by 2,110 acre-feet since 2013, essentially as Hazen and Sawyer predicted. Further, using recent recorded flow data from the U.S. Geological Survey, Hazen and Sawyer demonstrate that the Reclamation Ditch flows originally analyzed in the PWM Expansion SEIR were significantly overestimated by 16 to 67 percent in critical summer months. (August 11, 2020 Hazen Memo, pp. 10-11.) As shown in Hazen Appendix A, when current wastewater and surface water flows are accounted for, thereby reducing potential output from the Phase I PWM and PWM Expansion, implementation of the PWM Expansion (in lieu of the Project) is expected to result in a supply deficit ranging from -1,083 in normal year to -5,311 in dry years, even assuming MPWMD's low estimate of Peninsula water demand.

Although a supply deficit will occur when either ASR availability or wastewater and surface water flows are accounted for, if these scenarios occurred simultaneously, a greater supply deficit would result.

- The Staff Report also claims that M1W has agreements for more than enough water to supply the PWM Expansion. (Staff Report, p. 110.) However, Tables 2 and 3 provided by the PWM Expansion SEIR, coupled with the analysis of WWTP flows in the Applicant's Staff Report, plainly demonstrates that staff is incorrect. When all available assumed and estimated source water flows according to the Source Water Priority Table 3 in Appendix M to the SEIR are available, there is only 2,297 afy actually available to the PWM Expansion. (September 10, 2020 Hazen Memo, pp. 2-3.) The maximum treated water that could be produced by PWM Expansion with such source waters is 1,860 afy—that output is further reduced to 1,597 afy if the source water flows are reduced to account for current wastewater flows. (*Ibid.*) These outputs are far below the 2,250 afy assumed by M1W and the Staff Report for the PWM Expansion, and would not provide an adequate supply to meet Peninsula demand. (See Applicant's Staff Report, IV.O.2.)

4. PWM Expansion Conformity with Project Objectives and Criteria

- The Staff Report evaluates the Project's and the PWM Expansion's compliance with the primary and secondary Project objectives as set forth in the EIR/EIS. Staff concludes that PWM Expansion could meet each of these objectives, largely because the Staff Report had already concluded that the PWM Expansion could provide an adequate water supply to meet Cal-Am's needs and lift the CDO. (Staff Report, pp. 133-135.)
 - The Staff Report's conclusions regarding the PWM Expansion's ability to satisfy Project objectives and meet the feasibility criteria set forth by the CPUC were thoroughly addressed and refuted in Cal-Am's June 30 Letter. (See June 30 Letter to Commission, Att. A, pp. 63-73.)
 - Staff's determination that the PWM Expansion can meet all Project objectives is based upon the mistaken conclusion that the Expansion can provide a reliable water supply that will meet demand in Cal-Am's Monterey District service area—as explained above, even using the low end demand figures from MPWMD, Peninsula supply with the PWM Expansion, but without the Project, cannot accommodate that demand. (See Section J.3, *supra*; see also Applicant's Staff Report, Section IV.O.3.) Project Primary Objectives 1 through 7 each explicitly concern the proposed project's ability to accommodate present and future demand for water on the Monterey Peninsula as calculated by the CPUC, and thereby enable Cal-Am to abide by the requirements of the State Water Board CDO and deliver needed supplies to Peninsula water users. (Applicant's Staff Report, pp. Section IV.O.3.) Given that the PWM Expansion cannot provide a sufficient supply to meet even the hypothetical low demand figures, let alone the determinations of current and future demand issued by the CPUC, it cannot, by definition, satisfy these basic Project objectives. (*Ibid.*) As stated by the CPUC, the PWM Expansion would satisfy the basic purposes of the Project “*only in*

conjunction with construction of a desalination plant of some size within five to fifteen years” and would only delay the necessary implementation of a desalination project of some size. (CPUC Decision D.18-09-017, Appx. C, p. C-71 [emphasis added].) The Staff Report does not introduce any new evidence to suggest that the PWM Expansion is any more capable of meeting these objectives than when previously addressed by Cal-Am. (See June 30 Letter to Commission, Att. A, pp. 64-67.)

- With respect to Primary Objective 8, regarding minimizing energy requirements and GHG emissions, staff newly calls into question whether Cal-Am can use the carbon offsets ordered as a mitigation measure by the CPUC. (Staff Report, p. 134.) As explained above, implementation of Project Mitigation Measure 4.11-1 would result in the Project having zero net emissions from electricity consumption. (See Section F, *supra*.) The Staff Report’s claim that this mitigation measure is “less certain to provide actual greenhouse gas benefits” is entirely without support. Moreover, the case cited by staff, *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, has no bearing on the Project’s carbon offset program. In *Golden Door Properties*, the California Court of Appeal concluded that the respondent county’s GHG mitigation measures, permitting the purchase of carbon offset credits from any carbon offset registry anywhere in the world, lacked sufficient safeguards to ensure that the offsets were permanent and enforceable. (*Id.* at pp. 347-348.) By contrast, the GHG reduction program MM 4.11-1 provides a detailed loading order for achieving net zero GHG emissions for the Project, including the possibility of purchasing and retiring carbon offsets from approved registries that represent reduction of sequestration of one metric ton of CO₂e *within California*. (See Final EIR/EIS, p. 4.11-20.) Any comparison between the Project’s carbon offset plan and the mitigation measures rejected in *Golden Door* is unjustified.
- As to Primary Objective 9, requiring minimization of project costs and water rate increases, the Staff Report’s conclusion that the PWM Expansion conforms better to this objective is pure conjecture. (Staff Report, p. 134.) Phase I PWM project costs continue to skyrocket—as of June 2020, M1W stated that at the current projected delivery of 2,030 afy, costs for Phase I PWM water would increase to \$3,678 per acre-foot. (See Applicant’s Staff Report, Section IV.O.3; August 12, 2020 Cal-Am Letter to Commission, p. 3.) Even under the most optimistic scenario presented by M1W, Phase I PWM water costs will amount to \$2,508 per acre-foot—almost a 50 percent increase over the water rate approved for Phase I by the CPUC. (Applicant’s Staff Report, Section IV.O.3.) There is every reason to assume that the PWM Expansion will face similar cost overruns and therefore no evidence to conclude that the Expansion conforms to this objective.
- Secondary Objective 1 requires that project facilities be sited in areas that are protected against future sea-level rise—the Staff Report claims that the Project well field “would likely be affected directly by sea level rise and the accompanying erosion of the shoreline.” (Staff Report, pp. 134-135.) However, as described in Section C, *supra*, with current sea level rise projections, and

incorporating the reduction in coastal erosion rates to be expected from cessation of sand mining at the CEMEX site, the Project's well field would not be affected by climate change-related erosion, including dune recession, until near 2120. (See also Applicant's Staff Report, Section IV.H.) While two of the seven slant wells could be affected by sand burial from windblown sand prior to 2040, these impacts would be avoided with the implementation of special conditions proposed by Cal-Am. (*Ibid.*) As such, the Project well field, with the implementation of special conditions, will not be affected by coastal erosion during the wells' expected operating life and is therefore consistent with this objective. (See Applicant's Staff Report, Section IV.O.3.)

- The Staff Report's conclusion that the PWM Expansion can provide adequate conveyance capacity to accommodate any future supplemental water supplies, as required by Secondary Objective 2, is based entirely upon Exhibit 17 to the Staff Report, a one-page analysis of available well capacity to meet 10-year MDD and PHD prepared by MPWMD General Manager Stoldt, which was also included as Exhibit 9 to the 2019 Staff Report. (Staff Report, p. 135.) However, the Staff Report fails to explain how this report prepared by Stoldt speaks to the PWM Expansion's ability to provide excess conveyance capacity for *future* water projects, as is required to satisfy Secondary Objective 2. (See Applicant's Staff Report, Section IV.O.3.) By contrast, Cal-Am's project would provide adequate conveyance capacity to meet build out demand in accordance with adopted general plans and therefore satisfies this Project objective. (*Ibid.*)
- The Staff Report concludes that the PWM Expansion can meet Secondary Objective 3, which requires improvement of the ability to convey water to the Monterey Peninsula cities by improving existing connections at water satellite systems and by providing additional pressure to move water over the Segunda Grade. (Staff Report, p. 135.) In reality, staff has failed to provide *any* evidence that the PWM Expansion will provide such necessary conveyance improvements. (Applicant's Staff Report, Section IV.O.3.) Staff instead focuses on Cal-Am's ability to utilize the existing shared pipeline to convey Project product water. However, as explained above, existing agreements permit Cal-Am to utilize the shared pipeline, and the pipeline has ample capacity to serve Cal-Am's uses for the Project. (See June 30 Letter to Commission, Att. A, pp. 54-55.) Moreover, even if Cal-Am is required to construct an additional parallel pipeline to carry Project water, that potential additional pipeline remains before MPWMD for approval, and will be considered by the MPWMD Board in October 2020.
- The Staff Report goes on to apply each of the criteria used by the CPUC to assess the Phase I PWM, to the PWM Expansion, and concludes that the Expansion meets each of the criteria. (Staff Report, pp. 135-140.) Cal-Am has previously addressed each of the Staff Report's conclusions regarding PWM Expansion conformity with the CPUC's criteria (see June 30 Letter to Commission, Att. A, pp. 69-73). As explained in that submittal and the Applicant's Staff Report, based on the available evidence, the PWM Expansion cannot satisfy the feasibility criteria set forward by the CPUC. (See Applicant's Staff Report, Section IV.O.3.)

5. Adverse Environmental Effects

The Staff Report purports to compare the relative environmental impacts of the Project and the PWM Expansion, and concludes the PWM Expansion would have less adverse environmental impacts. (Staff Report, p. 140.)

- Staff contends that the Project would have significant adverse effects on coastal resources, including ESHA and protected species, while PWM Expansion would have few, if any, effects on coastal resources. (Staff Report, p. 140.)
 - As discussed in Section A, *supra*, Cal-Am's proposed Project would be inconsistent with Coastal Act and Marina LCP policies regarding sensitive habitat including wetland/vernal pond ESHA. (See Sections A, B, *supra*.) But with the implementation of Special Conditions 4, 5, and 7, the Commission will have adopted all feasible mitigation to reduce potential ESHA impacts, including potential wetland/vernal pond ESHA impacts. The proposed Project will also be consistent with all other Coastal Act and LCP policies with implementation of Special Conditions. (See Section J.2.c, *supra*; see also Applicant's Staff Report, Section IV.O.4.) The Project is also not anticipated to be impacted by sea level rise of coastal erosion until near the 2120 planning horizon, well beyond the economic lifespan of the Project's wells. (See Section C, *supra*.) Further, the CPUC has already determined that the Project will not result in substantial adverse impacts to coastal waters or marine resources during Project construction or operation with the implementation of all feasible and enforceable mitigation measures.
 - In contrast, the environmental analysis conducted for the PWM Expansion, as discussed in various comment letters on the PWM Expansion Draft and Final SEIRs, has significant flaws and requires substantial additional analysis. (See June 30 Letter to Commission, Ex. 20, Cal-Am Comments on PWM Expansion Final SEIR; see also January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, provided separately to Commission staff.) In fact, based on these significant flaws, the M1W Board denied certification of the SEIR. (See June 30 Letter to Commission, Ex. 18, M1W Board of Directors Staff Report.) Consequently, the full scope of the PWM Expansion's environmental impacts remains unknown.
 - Therefore, the Staff Report's conclusion that the PWM Expansion would have fewer adverse environmental effects is not supported by substantial evidence.
- Staff asserts that the PWM Expansion would be greenhouse gas neutral, while Cal-Am's Project, even with mitigation measures, "is less certain to result in permanent, enforceable, and verifiable" greenhouse gas reductions. (Staff Report, p. 140.)
 - As explained previously, the CPUC imposed Mitigation Measure 4.11-1, which requires Cal-Am's operations to result in net zero operational emissions, either through securing on-site or off-site renewable energy, or purchasing and retiring

renewable energy or carbon credits. (See Section F, *supra*; Applicant’s Staff Report, Section IV.O.4.) Thus, the PWM Expansion is not more likely to achieve greenhouse gas reductions; rather, emissions related to both projects’ electricity use are slated to be carbon neutral, though they would reach that goal through different means. (See Applicant’s Staff Report, Section IV.O.4.)

- Moreover, the PWM Expansion’s proposal to utilize landfill gas as a power source is uncertain at this time. (June 30 Letter to Commission, Att. A, p. 67.) If M1W is unable to secure reduced bids or obtain additional funding for this infrastructure, it will be unable to implement the landfill gas power system.
- Staff further states that “an underlying environmental concern applicable to both projects” is the possible effect of Cal-Am not having an adequate water supply to allow Cal-Am to reduce its Carmel River withdrawals by the CDO deadline. (Staff Report, p. 140.) Staff concludes that the risk of delay is “at least as likely to occur” if the Project moves forward instead of PWM Expansion. (*Ibid.*)
 - The assertion that the Project has a higher risk of delay than the PWM Expansion is not supported by the available facts. Cal-Am’s Project has received numerous approvals, while the PWM Expansion has obtained no approvals. The PWM Expansion will also experience further delay due to the M1W Board’s decision not to certify the Final SEIR, the lack of resources needed to revise the analysis in the Final SEIR, the potential need to recirculate the Final SEIR for further public review. (Applicant’s Staff Report, Section IV.O.1.) Cal-Am would also need to seek CPUC approval of a WPA to provide funding for M1W to implement the PWM Expansion. (*Ibid.*) Further, there are questions about how long it could take the Original PWM Project to achieve its water delivery obligations. (See June 30 Letter to Commission, Ex. 25, PWM Status Update Presentation; Section J.2.a, *supra*.) It is virtually impossible that the PWM Expansion would meet the CDO 2021 deadline.

6. Areas of Uncertainty

- The Staff Report claims that both the Project and PWM Expansion involve certain “areas of uncertainty” that relate to the Expansion’s status as a feasible Project alternative. (Staff Report, pp. 141-145.) Staff dismisses each “area of uncertainty” related to the PWM Expansion as inconsequential, while concluding that each identified uncertainty for the Project poses significant barriers to Cal-Am. The Staff Report appears willing to accept as insignificant the major questions surrounding the PWM Expansion, while simultaneously condemning the Project based on unfounded conjecture put forward by Project opponents like MCWD.
- Staff lists the following “areas of uncertainty” for the PWM Expansion:
 - **Amount of water produced**—Staff acknowledges that Phase I PWM is currently producing less water on startup than predicted, but asserts that this will be easily

remedied under M1W's plans, and argues that similar issues will not impact a potential supply from PWM Expansion. (Staff Report, p. 141.)

- Staff inappropriately dismisses the significant technological barriers facing the Phase I PWM that have yet to be resolved and which continue to cause significant uncertainty regarding the amount of water that the Phase I PWM is capable of producing. (See Applicant's Staff Report, Section IV.O.5.)
- **Type of source water**—The Staff Report refutes claims that there are potential issues associated with treating agricultural runoff that will be used by PWM Expansion. (Staff Report, p. 141.)
 - Despite staff's claims, the fact remains that that no agency has ever analyzed the impacts from using wastewater contaminated with pesticides or other chemicals as source water for the PWM Expansion. (June 30 Letter to Commission, Att. A, pp. 70-71.) Unless and until such analysis occurs, there will continue to be uncertainty regarding the PWM Expansion's ability to treat agricultural runoff to safe levels. (See Applicant's Staff Report, Section IV.O.5.)
- **CEQA**—The Staff Report acknowledges that the vote to certify the PWM Expansion Final SEIR failed, but argues that the M1W board is free to reconsider the Final SEIR if it so chooses. Staff argues that the primary area of controversy for the Final SEIR was whether adequate source waters exist for the Expansion, and that substantial evidence shows that source waters are adequate. (Staff Report, p. 142.)
 - The Staff Report fails to recognize that multiple, independent barriers remain before the M1W Board may certify the Final SEIR for the PWM Expansion. (See Applicant's Staff Report, Section IV.O.5.) First, in denying certification of the Final SEIR, the M1W Board of Directors explicitly recognized the myriad remaining flaws in the Final SEIR's analysis, including unresolved gaps regarding source water availability, water supply and demand, impacts to agricultural supplies, and the Final SEIR's failure to analyze the PWM Expansion as either an alternative to or a cumulative project with the Project. (*Ibid*; see also May 20, 2020 M1W Board of Directors Staff Report, p. 2.) M1W does not have the funds to correct these major deficiencies in the Final SEIR, and therefore has stopped all work on the PWM Expansion—there is no indication that M1W intends to resume its efforts to certify a complete SEIR any time soon. (See Applicant's Staff Report, Section IV.O.5.)
 - Further, as discussed above, before M1W is able to certify the PWM Expansion SEIR, it will be required to recirculate the SEIR for additional public notice and comment regarding substantial new information that has been learned since the Draft SEIR was circulated. (See Applicant's Staff

Report, Section IV.O.1; see Section J.2.b, *supra*, CEQA Guidelines, § 15088.5, subd. (a); *Cadiz Land Co.*, *supra*, 83 Cal.App.4th at p. 95.) As such, there continues to be significant uncertainty regarding when or whether M1W will be able to issue a certified Final SEIR for the PWM Expansion.

- **Funding and Water Purchase Agreement**—Staff claims that while Cal-Am would need to seek CPUC approval of a new WPA for PWM Expansion water, Cal-Am “has not had an incentive to do this to this date because it is pursuing its desalination project.” The Staff Report therefore argues that there would be no barriers to WPA consideration “if Cal-Am needs to proceed with the Pure Water Expansion.” (Staff Report, p. 142.)
 - The Staff Report fails to acknowledge that Cal-Am has in fact met with M1W and MPWMD on multiple occasions to discuss a WPA for PWM Expansion water. (See Applicant’s Staff Report, Section IV.O.5; see Section J.4, *supra*; Applicant’s Staff Report, Exhibit 30, p. 1.) However, Cal-Am determined that it could not, at that time, pursue a WPA for Expansion water given the significant uncertainties surrounding the PWM Expansion. (See Applicant’s Staff Report, Exhibit 30, p. 2.) As demonstrated above, these uncertainties remain unaddressed. Finally, as discussed above, any WPA for PWM Expansion water would need to include additional performance measures to guarantee delivery of the full production volume of the PWM Expansion, and indemnification to Cal-Am in the event that the Expansion does not provide an adequate supply. (See Applicant’s Staff Report, Section IV.O.5.) These protections would be necessary to ensure that Cal-Am does not need to undertake additional Carmel River or Seaside Basin withdrawals to serve its customers if water demand cannot be met by the PWM projects, without the Project. Accordingly, there is no reason to believe that Cal-Am could reasonably enter into a WPA for PWM Expansion any time soon, much less obtain the CPUC’s approval of such an agreement.
- Staff lists the following “areas of uncertainty” for the Project:
 - **Coastal hazards and expected operating life of slant wells**—Staff argues that there are two areas of uncertainty associated with the Project slant wells: (1) the rate of erosion at the CEMEX site cannot be known until sand mining ceases; and (2) while Cal-Am acknowledges that the wells would need to be related after 20-25 years, Cal-Am has not identified alternative well locations. Therefore, there is uncertainty about how the Project would operate after the first 20-25 years of its 60-year operating life. (Staff Report, p. 142.)
 - As explained in Section C, *supra*, the Project well field will not be affected by climate-change-related coastal erosion until at least 2120. (See Applicant’s Staff Report, Section IV.O.5.) With the implementation of special conditions proposed by Cal-Am, the current slant well sites will

allow the wells to avoid hazards related to coastal erosion during their expected operating life. (*Ibid.*)

- **Water rights**—the Staff Report asserts that there are two areas of uncertainty associated with Project water rights: (1) whether Cal-Am will be able to satisfy its ongoing burden to demonstrate that its withdrawals and use of fresh water (non-seawater) will not harm or cause injury to any other legal water user; and (2) whether Cal-Am will need to incur additional costs to return greater percentages of SVGB water to Castroville. (Staff Report, p. 143.) Staff also points out that Marina has filed litigation regarding limitations on uses of water at the CEMEX site. (*Id.*, p. 144.)
 - As acknowledged by the Staff Report, no water rights are necessary for the extraction of seawater from the SVGB. (Staff Report, p. 70.) With respect to the non-seawater component of the Project’s source water, Cal-Am has proposed protections to ensure that its withdrawal of water does not harm existing SVGB groundwater users. (See Applicant Proposed Measures 4.4-3.) Further, the EIR/EIS explicitly concluded that the Project would not impact groundwater supplies in the SVGB. (See Final EIR/EIS, pp. 4.4-64 to 4.4-70.) The Commission’s own independent hydrogeologist confirmed groundwater supplies will not be adversely impacted by Project operation. (See Applicant’s Staff Report, Section IV.J.)
 - Additionally, it is not expected that the Project would withdraw greater amounts of “non-seawater” than estimated in the EIR/EIS. Rather, the Commission’s independent hydrogeologist confirmed that, under reasonable modeling scenarios, the range of ocean water percentages to be utilized by the Project are consistent with the modeling set forth in the EIR/EIS. (See Section E, *supra*.) Regardless, even if Cal-Am were to extract a greater percentage of “non-seawater” than originally estimated in the EIR/EIS, the CPUC has imposed costs associated with noncompliance with the Return Water Settlement Agreement on Cal-Am, not the ratepayers. (CPUC Decision D.18-09-017, p. 111; see also Applicant’s Staff Report, Sections IV.J, IV.N.)
 - Further, any determination regarding water rights is not within the Commission’s jurisdiction. On the contrary, the State Water Board—the agency charged with responsibility for regulating state water resources (Water Code, § 174; Pub. Resources Code, § 30412)—has determined that Cal-Am can develop all necessary water rights to operate the Project. (CPUC Decision D.18-09-017, p. 80.) Nothing has occurred since the time of the State Water Board’s 2013 opinion to change the Board’s assessment in any way.
 - Finally, as explained in Section J.2.b, *supra*, Cal-Am believes that the claims made by Marina and MCWD in the litigation over water use at the

CEMEX site are meritless. The CPUC has already determined that Cal-Am may develop appropriative groundwater rights if the Project extracts otherwise unusable groundwater without harming other existing lawful groundwater users, and Cal-Am returns any fresh water to the Basin. (*Ibid.*) This framework by which Cal-Am may perfect rights to Project source water cannot be modified via this litigation.

- **Effects on wetlands and vernal ponds**—Staff argues that, as discussed in Staff Report Section II.G, recent hydrogeological monitoring conducted by the Commission’s hydrogeologist suggests that Cal-Am’s slant wells could result in groundwater drawdown at nearby vernal ponds and wetlands. Staff notes that there is no currently available data to confirm whether there is a connection between groundwater and the wetlands/vernal ponds. (Staff Report, p. 144.)
 - As stated in the Staff Report, recent reports regarding Project slant well impacts on nearby vernal ponds and wetlands are inconclusive. (See Applicant’s Staff Report, Section IV.O.5.) As such, Cal-Am has proposed a Special Condition requiring the implementation of an Adaptive Management Program which would monitor the vernal ponds to determine: (1) whether the ponds are groundwater dependent and (2) if so, what changes to the ponds might be associated with Project-related drawdowns. (Applicant’s Staff Report, Special Condition 7.) If the additional analysis determines that there would be impacts from pumping-related drawdowns, Special Condition 7 would thereafter require Cal-Am to implement a Wetland Resiliency, Enhancement, Restoration, and Monitoring Plan to mitigate for potential vernal pond impacts. (*Ibid.*) Accordingly, any uncertainty has been adequately addressed through a Special Condition.
- **Lack of water distribution pipeline**—Staff notes that: (1) MCWD claims that its product water pipeline does not have sufficient capacity to accommodate Project product water and (2) MPWMD chose not to make the necessary approval for Cal-Am to construct a parallel pipeline at this time. (Staff Report, p. 144.)
 - The Staff Report fails to recognize that existing agreements explicitly permit Cal-Am to utilize the shared pipeline for the conveyance of Project product water, and that there remains sufficient capacity in the pipeline to accommodate such water. (See Applicant’s Staff Report, Section IV.O.5; June 30 Letter to Commission, Att. A, pp. 54-55.) Moreover, Cal-Am’s alternate proposal to construct an additional pipeline, running in parallel to the shared pipeline, remains entirely feasible—while MPWMD has not yet issued the approvals for the parallel pipeline, the MPWMD Board will consider approvals for the pipeline at its October meeting. (See July 31, 2020 MPWMD Board of Directors Final Minutes, p. 1.) Cal-Am has every reason to believe that MPWMD will issue approvals for the proposed conveyance pipeline.

- **Lack of required outfall liner**—The Staff Report states that there is no approved design in place for the outfall liner proposed as a mitigation measure in the EIR/EIS, and that it is unknown what additional environmental review or permits would be needed for the liner. Staff further addresses Cal-Am’s suggestion of a “spray-on” liner, but notes that M1W has not yet evaluated this proposal, and argues that any installation of the spray-on liner that requires work on the beach would adversely affect snowy plover habitat. (Staff Report, pp. 144-145.)
 - As a threshold matter, the Staff Report ignores the fact that the CPUC analyzed reasonably foreseeable impacts of the liner installation method proposed in the Final EIR/EIS, and concluded that these impacts would be less-than significant with mitigation. Nevertheless, Cal-Am has proposed to the Commission a less-impactful feasible alternative method for installing the liner that would be done almost entirely within the outfall and would involve no ground disturbance within the Coastal Zone of the City or the County. (See August 17, 2020 Cal-Am Letter to Commission.) As described in Section IV.F of the Applicant’s Staff Report, Cal-Am has proposed Special Condition 4, which would require Cal-Am to implement this proposed spray-lining method prior to the commencement of Project operations. (See Applicant’s Staff Report, Section IV.F.) Because Special Condition 4 guarantees there will be no adverse impacts to ESHA caused by the installation of the outfall liner, this future Project component does not raise concerns regarding Project certainty.

7. **“No Action” Alternative**

- The Staff Report states that under a “no action” alternative, Cal-Am would need to pursue alternative water supply solutions. (Staff Report, pp. 145-146.) Staff argues that the most likely scenario is that Cal-Am would pursue the PWM Expansion. (*Ibid.*) Staff also notes that if Cal-Am needs to obtain an additional supply in the next decade due to shortfalls in PWM Expansion supply, then it may be possible that Cal-Am would need to continue overpumping from the Carmel River. (*Id.*, p. 146.)
 - Cal-Am agrees with the Staff Report that the other water supply projects which have been considered over the past two decades have proposed to use open water intake and could also affect areas of ESHA, thereby potentially causing greater adverse impacts than Cal-Am’s proposed Project. (See Staff Report, pp. 145-146.) In the course of reviewing the Project over six years, the CPUC analyzed, and rejected eleven different alternatives to the Project, including the PWM Expansion. Cal-Am also agrees that none of those proposals could meet the deadline imposed by the State Water Board’s CDO. Cal-Am is not likely to pursue them.
 - As explained above and in Applicant’s Staff Report, the PWM Expansion is not a feasible alternative and has a greater risk of delay than does the desalination Project due the M1W’s declining to certify the Final SEIR, the lack of resources needed to revise the analysis in the Final SEIR, and the potential need to

recirculate the Final SEIR for further public review. (See Section J.2.b, *supra*; Applicant's Staff Report, Section IV.O.1.)

- Additionally, if the Project is not approved, Cal-Am will not have an adequate water supply in place to meet its obligation under the State Water Board's CDO. Although Cal-Am could seek an extension of the CDO deadline, approval of such an extension is speculative. Moreover, any extension would lead to continued excessive water withdrawals from the Carmel River in order to make up for shortfalls in supplies from the PWM project as a whole. The Staff Report does not adequately acknowledge the very real possibility that Cal-Am will be forced to continue pumping from the Carmel River to meet regional water demands or otherwise implement severe water rationing measures, along with any associated environmental, economic and environmental justice impacts.

K. Coastal Act Section 30260 Override for Coastal-Dependent Facility (Staff Report, pp. 147-153)

- Cal-Am agrees with the Staff Report's determination that Coastal Act section 30260 applies to the Project, has been incorporated into Marina's LCP, and that the Commission may conduct a section 30260 analysis in considering the Project. (Staff Report, pp. 148-149.) Cal-Am also agrees with staff's determination that the Project is coastal-dependent and an industrial facility (*Ibid.*), but disagrees that it does not meet the three tests under section 30260 (*Id.*, pp. 150-153). As explained in the Applicant's Staff Report, Section IV.P, and below, the Project satisfies section 30260, and the Commission may approve it.

1. Alternative Locations

- The Staff Report wrongly contends that under section 30260 the PWM Expansion is a feasible and less environmentally damaging alternative to the Project. (*Id.*, pp. 150-151.) First, as noted in the Applicant's Staff Report, Section IV.P, the alternatives analysis required under Section 30260 allows the Commission to only consider alternative locations for its project, not entirely different alternative projects. (See also June 30 Letter to Commission, Att. A, p. 76 [citing cases].) Second, even if the Commission could consider a separate alternative project, the PWM Expansion is not a feasible alternative. (See Applicant's Staff Report, Section IV.O [explaining that, among other reasons, the PWM Expansion is infeasible due to technological issues, delay, increased costs, and unknown environmental impacts].)
- As described in Applicant's Staff Report, Section IV.P and in the June 30 Letter to the Commission, Att. A, pp. 76-77, the Final EIR/EIS evaluated alternative locations for the Project's slant well network and determined that the CEMEX site is the environmentally superior alternative location. For instance, the two alternative locations considered for the slant wells were found infeasible due to impacts on marine and terrestrial biological resources, an inability to draw sufficient water, and additional permitting complexity.
- To the extent staff cites Coastal Act section 30233 regarding fill in coastal waters as a basis for evaluating whether alternative projects are less environmentally damaging, this

EXHIBIT D

ATTACHMENT C

**RESPONSES TO MCWD’S AUGUST 14, 2020 COMMENT LETTER,
ATTACHMENTS A & B**

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requirements, and annual operation and maintenance costs essentially remains the same. Based on available information, the CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single-family residence for the desalination facility, and that increase is not tied to per acre foot water costs. That is why the CPUC found that approving a smaller 4.8 MGD desalination facility would not result in any “significant, if any, cost savings to ratepayers” and determined that alternative was not feasible. (CPUC Decision 18-09-017, p. 129.)

- MCWD alleges that rates are increasing as conservation increases, and that this must be addressed through a change to pricing structure that would need to be approved by the CPUC. (MCWD Letter, p. 78.)
 - MCWD is correct that the CPUC has sole jurisdiction over ratemaking and any change of this nature would need to be considered through an entirely separate process. (MCWD Letter, p. 78.) As Cal-Am has previously explained, water conservation and reduction in water use can have the unintended consequence of increasing water prices because water utilities generally have high fixed costs associated with infrastructure, improvements, staff, and maintenance. This situation is not unique to Cal-Am; on average, about 70 percent of a water utility’s revenue is devoted to fixed costs. When sales are reduced as a result of water conservation, the variable costs go down, but the fixed costs remain, so the cost of each unit of water must increase to support the fixed costs and keep the water utility’s finances stable. While customers who conserve will always pay less than those who do not, they may not see substantial reductions in monthly bills due to conservation because the fixed costs remain. (See June 30 Letter to Commission, p. 93.)
- MCWD also states that Cal-Am has not provided information regarding how much water its customers use or how much they pay altogether for their water. (MCWD Letter, p. 79.)
 - Cal-Am has provided ample information on how much water its customers use and how much they pay for the water based on average use and average costs. (See Dudek Memorandum, pp. 3-4; June 30 Letter to Commission pp. 37, 92-93.)¹³ Moreover, Attachment B, Section I and the Applicant’s Staff Report, further describe the costs to customers who are eligible for Cal-Am’s Customer Assistance Program. For example, because the discount associated with the Customer Assistance Program, as proposed under Special Condition 13, will increase from 30% to 50%, water bills for enrolled customers will actually decrease after Project implementation.

I. Assessment of Alternatives

¹³ Additional information regarding rates in the Monterey service area is available here: <https://www.amwater.com/caaw/Customer-Service-Billing/Water-Rates/Monterey-District>.

1. Interpretation of Coastal Act Sections 30233 and 30260

- MCWD asserts that Coastal Act sections 30233 and 30260 and CEQA require the Commission to consider complete alternatives to desalination facilities, relying on guidance documents issued by the Commission. (MCWD Letter, pp. 48-49, 67-68.)
 - MCWD misleadingly cites two guidance documents issued by the Commission for the proposition that an alternatives analysis may be “need[ed] to evaluate whether using or providing a public water source is a feasible option” and that the Commission’s policy is to consider complete alternatives to desalination under Coastal Act sections 30233 and 30260. (MCWD Letter, pp. 48-49.) The Commission’s policy statements do not support MCWD’s claims.
 - First, the policy statements affirm that section 30233 only applies to projects involving any diking, dredging, or filling in coastal waters. (See *Briefing on the Applicability of Coastal Act Policies to Public and Private Desalination Facilities*, dated February 20, 2003, p. 7 [“Section 30233(a) requires in part that projects involving fill in coastal waters be allowed only under particular conditions.”] [emphasis added]; *Desalination and the Coastal Act*, dated March 20, 2004, p. 30 [“To place fill in coastal waters, a proposed development must fall within one of the eight categories listed under Coastal Act section 30233”] [emphasis added].) As explained in Applicant’s Staff Report, section 30233 does not apply to the proposed Cal-Am Project because the Project does not propose diking, filling, or dredging of coastal waters. (Applicant’s Staff Report, Section IV.I.)
 - Second, the policy statements affirm that section 30260 is limited to considering alternative locations. (See *Briefing on the Applicability of Coastal Act Policies to Public and Private Desalination Facilities*, dated February 20, 2003 [“Section 30260 states that coastal-dependent facilities may be permitted . . . if there are no feasible, less environmentally damaging alternative locations.”] [emphasis added]; *Desalination and the Coastal Act*, dated March 20, 2004, p. 30 [noting section 30260 asks “[a]re alternative locations infeasible or more environmentally damaging?”] [emphasis added].) Further, as discussed in the Staff Report Response, there is no feasible alternative project that better protects public trust resources. (Applicant’s Staff Report, Section IV.P.)
 - As explained in the Applicant’s Staff Report, Section IV.O, Coastal Act section 30233 does not apply to the Proposed Project. (See Pub. Resources Code, § 30233, subd. (a); June 30, 2020 Letter to Commission, pp. 45-46.) Here, the Project does not involve any diking, dredging, or filling of open coastal waters—as such, section 30233 does not provide the Commission with any authority to consider whether there is a “feasible less environmentally damaging alternative” to the Project. (June 30, 2020 Letter to Commission, p. 46; Section C, *supra*.) Even if certain components did constitute “fill”—which they do not—the

Commission’s authority would be limited to review of alternatives as to those components, not wholesale alternatives to the entire Project. (June 30, 2020 Letter to Commission, p. 46.)

- Similarly, the plain language of section 30260 grants the Commission the authority to consider only “*alternative locations*” for coastal-dependent facilities—nothing in this section permits the Commission to assess wholesale project alternatives. (June 30, 2020 Letter to Commission, pp. 46-47; see also Attachment B, Section J.1.) Further, as discussed in Attachment B, Section J.1, the Commission is limited to considering alternatives only within the Coastal Zone.

2. Feasibility

- MCWD argues that the PWM Expansion is “ready to be approved and implemented in short order,” asserting that while the M1W Board declined to certify the Final SEIR on April 27, 2020, in a second vote at that meeting, the M1W expressly voted against denying certification of the Final SEIR and terminating further action on the PWM Expansion. (MCWD Letter, p. 49.)
 - First, MCWD ignores that a letter from M1W to Cal-Am explicitly confirmed that the M1W Board had, on April 27, 2020, taken action “denying certification” of the Final SEIR for the PWM Expansion. (See June 8, 2020 M1W Letter to Cal-Am, p. 1.)
 - Second, MCWD’s assertion that the PWM Expansion can be implemented in short order wholly ignores the fact that M1W lacks the funding to correct the deficiencies identified in the PWM Expansion SEIR, which prompted the M1W Board to deny certification of the SEIR. (See Applicant’s Staff Report, Section IV.O.1.) As stated by M1W itself, “[M1W] does not have additional budget funds at this time for dealing with any additional deficiencies that have been identified . . . or could be identified in the future. [M1W] has suspended all of the remaining contracts on these matters to prevent further consultant expenditures.” (See May 20, 2020 M1W Board of Directors Staff Report, p. 1.) Moreover, as explained in M1W’s August 20, 2020 letter to the Commission, M1W has suspended all work on the PWM Expansion. (See August 20, 2020 M1W Letter, p. 3.)
 - Finally, before M1W could certify the PWM Expansion SEIR, it must recirculate the SEIR to provide for public notice and comment regarding significant new information, including the post-2013 wastewater or “WWTP” flow data recently disclosed by M1W. (See Applicant’s Staff Report, Section IV.O.1; see Attachment B, Section J.2.b; Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5.) Similarly, as discussed below, M1W has proposed the potential construction of additional deep wells. Initially, M1W anticipated adding a third deep injection well, but is now discussing adding a fourth. (See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10 [discussing amending bid

request for the third deep injection well to include construction of a fourth deep injection well], available at <https://montereyonewater.org/290/Audio-Recordings-of-Board>.) Should M1W choose to construct these wells, it would again be required to revise and recirculate the PWM Expansion SEIR to permit public notice and comment regarding the impacts associated with these wells. (See Applicant's Staff Report, Section IV.O.1.) There is no reason to believe that M1W will be able to suddenly pick up the pieces of the PWM Expansion and approve and implement a complex water treatment system "in short order."

- MCWD asserts that the M1W Board did not deny certification of the Final SEIR due to deficiencies in the SEIR's environmental analysis, but rather that the agenda packet for the M1W Board's April 27, 2020 meeting contained detailed responses to Cal-Am comments on the SEIR. (MCWD Letter, pp. 49-50.)
 - Contrary to MCWD's claims, M1W has expressly acknowledged that the following significant deficiencies remain unaddressed in the SEIR that was provided to the M1W Board for certification:
 - The SEIR did not adequately address comments expressing concern that M1W cannot document the quantity and reliability of the source water available for the PWM Expansion;
 - The SEIR fails to support its conclusions regarding long-term water supply and demand, which are contrary to the CPUC demand determination and estimates from Peninsula cities;
 - The SEIR fails to properly evaluate potential impacts to agricultural water supplies due to reductions in available agricultural irrigation water because of the Expansion;
 - The SEIR does not evaluate the PWM Expansion as either an alternative to or a cumulative project with the Project. (May 20, 2020 M1W Board of Directors Staff Report, p. 2; August 12, 2020 Cal-Am Letter to Commission.)
 - M1W staff has stated that they do not have the funding to fix these deficiencies, and has therefore halted all work on the PWM Expansion. (See May 20, 2020 M1W Board of Directors Staff Report, p. 1.) It does not appear that M1W intends to or is capable of correcting these significant deficiencies in the near future.
- MCWD asserts that the Commission was required to consider the PWM Expansion as an alternative to the Project because there is "ample new information demonstrating that PWM Expansion is a feasible alternative." (MCWD Letter, p. 50.)
 - MCWD does not point to any new information demonstrating that the PWM Expansion has become a feasible Project alternative. In fact, just the opposite has occurred. In an August 20, 2020 letter to the Coastal Commission, M1W provided new information regarding wastewater flows from 2014 to 2019, that

were not previously available to the public or analyzed in the SEIR for the PWM Expansion. In an August 23, 2020 memorandum (the “August 23, 2020 Hazen Memo”), Hazen & Sawyer evaluated the new flow information and found that the new flow information only further confirmed the conclusion that source water for the PWM Expansion is inadequate and speculative and that the Expansion is not a feasible alternative to Cal-Am’s Project. This analysis built upon the Hazen & Sawyer memorandum provided to the Commission on August 11, 2020, which reached the same conclusion (the “August 11, 2020 Hazen Memo”).

- Moreover, M1W’s new information regarding wastewater flows, which would provide a significant proportion of the source waters for the PWM Expansion, itself constitutes significant new information under CEQA.
 - Under CEQA, when “significant new information” is added to an EIR after the public notice and comment period, but before certification of the EIR, the lead agency must provide notice of an additional public comment period before certifying the EIR. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; *Save Our Peninsula Committee*, 87 Cal.App.4th 99, 130; *Cadiz Land Co. v Rail Cycle* (2000) 83 Cal.App.4th 74, 95.)
 - Appendix I to the PWM Expansion Final SEIR does not consider post-2013 WWTP flow data, which demonstrates a consistent trend of decreasing WWTP flow to source the PWM Expansion, despite the fact that M1W apparently possessed this data when preparing the Final SEIR. (See August 23, 2020 Hazen Memo, p. 4; see Applicant’s Staff Report, Section IV.O.1.) Accordingly, overall demand for the source waters listed for the PWM Expansion far exceeds available supplies in both Normal/Wet years and Dry years. (August 23, 2020 Hazen Memo, p. 6.) This newly released post-2013 WWTP flow information constitutes significant new information under CEQA because M1W must identify and analyze available water sources for the Expansion in order to demonstrate whether that project is feasible or whether potential environmental impacts could result. Regardless of where this new water is sourced, its diversion to the PWM Expansion could generate a significant new impact, which has yet to be evaluated. Likewise, by not including post-2013 WWTP flow data, which appears to have been in M1W’s possession for years, M1W has created a document “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (See CEQA Guidelines, § 15088.5, subd. (a)(4).) Because the public was unable to accurately analyze whether the PWM Expansion could achieve its stated purpose, the Final SEIR failed in its fundamental purpose as an informational document by excluding this crucial information from public consideration. As a result of all of these flaws, the Final SEIR will need to be revised and recirculated for public comment, a process that could add at least an additional six to twelve

months or more to the project's timeline—further demonstrating that the PWM Expansion is not a feasible alternative.

- Similarly, M1W has proposed the potential construction of additional deep wells in an attempt to resolve the injection refusal issues currently faced by the Phase I PWM. Initially, M1W anticipated adding a third deep injection well, but is now discussion adding a fourth. (See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10 [discussing amending bid request for the third deep injection well to include construction of a fourth deep injection well], available at <https://montereyonewater.org/290/Audio-Recordings-of-Board>.) Should M1W choose to construct these wells, it would again be required to revise and recirculate the PWM Expansion SEIR to permit public notice and comment regarding the impacts associated with these wells. (See Applicant's Staff Report, Section IV.O.1.)
- MCWD contends that the PWM Expansion satisfies each of the alternative feasibility criteria under CEQA and the Coastal Act, and is in fact more feasible than the Project. (MCWD Letter, pp. 50-53.)
 - As further explained below, the PWM Expansion has not been demonstrated to be a feasible project and should not be considered an alternative to the Project. (See Applicant's Staff Report, Section IV.O.1; see also June 30, 2020 Cal-Am Letter to Coastal Commission, Att. A, Section I.2.)

a. “Capable of Being Accomplished in a Successful Manner”

- MCWD takes issue with Cal-Am's statement that the serious concerns with technology proposed for use in the Phase I PWM means that the PWM Expansion is not capable of being accomplished in a successful manner. Instead, MCWD argues that M1W has addressed each of Cal-Am concerns regarding the Phase I PWM and states that “there is no evidence suggesting that the issues raised by Cal-Am cannot be resolved.” (MCWD Letter, pp. 50-51.)
 - As noted in the Applicant's Staff Report, the Phase I PWM continues to face significant, ongoing technological issues preventing the project from operating at full capacity, including sinkholes and/or subsidence, and injection refusal. (See Applicant's Staff Report, Section IV.O.1.) As a result, M1W estimates that current annual injection volume for Phase I PWM is only 2,030 afy—less than 58 percent of the 3,500 afy allocated for Cal-Am under the Water Purchase Agreement (“WPA”). (August 12, 2020 Cal-Am Letter, p. 2.)
 - In response to Cal-Am's concerns regarding inadequate injection rates from the Phase I PWM, M1W has proposed costly repairs to the shallow wells, final commissioning of the deep wells, and the addition of a third, and possibly a fourth, deep injection well. (August 12, 2020 Cal-Am Letter, p. 2.) However, it is not clear that these proposed actions will allow the Phase I PWM to operate at its expected capacity. In fact, M1W has recently been forced to propose the

addition of a fourth deep injection well, as the previously proposed third well is apparently inadequate to remedy injection refusal issues. (See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10 [discussing amending bid request for the third deep injection well to include construction of a fourth deep injection well], available at <https://montereyonewater.org/290/Audio-Recordings-of-Board>.) Given that Phase I PWM and PWM Expansion would utilize the same technology, the technological concerns associated with the Phase I PWM apply equally to the PWM Expansion, and it is likely that M1W would also be forced to propose a similar continuing cycle of fixes for the PWM Expansion as is often the case for groundwater replenishment projects. (See Applicant’s Staff Report, Exhibit 23, September 10, 2020 Hazen Memo, p. 5.)

- MCWD claims that concerns regarding availability of source waters for the PWM Expansion were fully addressed in Appendix M to the Final SEIR, and that there is far greater uncertainty regarding the Project’s source waters. (MCWD Letter, p. 51.)
 - MCWD admits that PWM Expansion source water is “subject to certain seasonal variability.” (MCWD Letter, p. 51.)
 - As Cal-Am has previously explained to the Commission, the water rights that M1W claims are available for the PWM Expansion in SEIR Appendix M are not permanent water rights, but instead are merely interruptible use entitlements, and many of those entitlements are disputed by the holders of the water rights. (August 12, 2020 Cal-Am Letter, p. 4.) The following issues remain regarding claimed PWM Expansion source waters: ARWRA source waters; questionable modifications of source waters; disputed agricultural source waters; source water quality issues; and overestimation of water supplies during drought years. (*Id.*, pp. 4-5.)
 - Regarding source waters, M1W, the Stoldt Memo, and MCWD do not account for the risks of using wastewater as a primary water source for the PWM Expansion—wastewater is subject to significant variability according to demand and drought conditions. (August 11, 2020 Hazen Memo, pp. 6-7.) Appendix I to the PWM Expansion SEIR fails to account for WWTP flows since 2013, or the fact that WWTP flows have been decreasing on the Peninsula, and thereby overstates available wastewater flows that may be used as source water. (*Id.*, p. 7.) Indeed, data regarding wastewater flows was entirely unavailable until it was provided by M1W in its August 20, 2020 letter to the Commission. Under a corrected WWTP flow analysis using this new information, there would be significantly depressed WWTP source water supplies for the PWM Expansion in Normal/Wet years, and no flow available for Phase I PWM and PWM Expansion during Dry years. (August 23, 2020 Hazen Memo, p. 6.) Moreover, the significant new information regarding wastewater flow data post-2013 requires recirculation of the PWM Expansion Final SEIR for renewed notice and comment. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; *Cadiz Land Co.*, *supra*, 83 Cal.App.4th at p. 95.)

- With respect to surface water flows, recent data from the U.S. Geological Survey shows that average surface water flows in the Reclamation Ditch are lower than assumed in the Final SEIR, and therefore the SEIR overstates the availability of Reclamation Ditch flow as source water for the Phase I PWM and the PWM Expansion. (August 11, 2020 Hazen Memo, p. 11.) Moreover, agricultural flows have decreased by one-third in recent years, meaning that monthly flows to the Blanco Drain and the Agricultural Wash Water are also below what is projected in the SEIR. (*Ibid.*)
- Updated Figure 4 in the August 23 Hazen Memo shows that when lower WWTP and Reclamation Ditch flows are accounted for, demand for source waters identified for the PWM Expansion far exceeds available supplies in Normal/Wet years and in Dry Years. (August 23, 2020 Hazen Memo, p. 6.) Without an adequate source water supply, the Peninsula will have to choose between supplying source water for the PWM Expansion or for the CSIP system. (August 11, 2020 Hazen Memo, pp. 13-14.)
- Finally, the PWM Expansion fails to comply with state mandates specifically designed to ensure that water suppliers are capable of providing a drought-proof supply in the face of advancing climate change. Specifically, Governor Newsom’s 2020 Water Resilience Portfolio’s makes clear that water supplies must plan for prolonged drought conditions, and “[d]evelop strategies to protect communities and fish and wildlife in the event of a drought lasting at least six years.”¹⁴ As discussed above, during Normal/Wet years and in Dry years, the PWM Expansion will have inadequate source waters, and this deficit will only increase during prolonged periods of drought—as such, the Expansion does not achieve Governor Newsom’s water supply resilience goals. Only the Project is capable of providing a reliable, drought-proof supply to the Monterey Peninsula.

b. “Within a Reasonable Period of Time”

- MCWD argues that while the PWM Expansion may not be implemented before the CDO deadline, “the evidence shows that PWM Expansion could be implemented long before the [Project],” and therefore can be completed within a reasonable period of time. To support this argument, MCWD again notes that the M1W Board rejected a motion to cease work on the PWM Expansion. (MCWD Letter, pp. 51-52.)
 - MCWD does not provide *any* evidence to support its assertion that the PWM Expansion can be implemented before the Project. Moreover, the M1W Board has denied certification of the PWM Expansion SEIR, which must now be recirculated to account for the significant new information disclosed by M1W regarding wastewater flow data and the potential additional deep injection wells. (Pub. Resources Code, § 21092.1; CEQA Guidelines, § 15088.5; *Cadiz Land Co.*,

¹⁴ 2020 Water Resilience Portfolio (July 2020), p. 26, available at https://waterresilience.ca.gov/wp-content/uploads/2020/07/Final_California-Water-Resilience-Portfolio-2020_ADA3_v2_ay11-opt.pdf.

supra, 83 Cal.App.4th at p. 95.) Coupled with the fact that M1W does not possess the funding to correct deficiencies in the SEIR, and M1W’s order to its staff to suspend work on any aspect of the PWM Expansion (see August 20, 2020 M1W Letter to Commission, p. 3), it is clear that ***the Expansion has now been delayed indefinitely.***

- MCWD claims that the Commission is not bound by the CDO deadline in determining whether the PWM Expansion is a feasible Project alternative. (MCWD Letter, p. 76.)
 - Without a feasible water supply, Cal-Am cannot provide a supply to replace its Carmel River withdrawals, which it is currently obligated to cease by the December 31, 2021 CDO deadline. The State Water Board CDO provides that the conditions thereto, as well as conditions set forth in previous iterations of the CDO, “shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with this certification.” (State Water Board Order WR 2016-0016, p. 27.) As such, if Cal-Am does not obtain a new, permanent supply to replace its Carmel River withdrawals by the CDO deadline, the CDO conditions, including the moratorium on new service connections mandated by the 2009 State Water Board CDO, will remain in effect. The Commission must consider the CDO deadline, as failure to meet the CDO milestones would result in severe consequences for Cal-Am and its customers, including continuation of the service connection moratorium and the potential for mandatory rationing and further restrictions on water usage. (See Final EIR/EIS, pp. 5.4-10 to 5.4-11.)

c. “Taking Into Account Economic, Environmental, Social, and Technological Factors”

- MCWD argues that the PWM Expansion would “cost much less” than the Project, and would save Monterey Peninsula ratepayers millions of dollars. (MCWD Letter, p. 52.)
 - While PWM Expansion would cost somewhat less than Cal-Am’s Project, it will not provide sufficient water to meet Peninsula water demand (even the low demand numbers advocated by MPWMD), and therefore it is not a feasible alternative. It also should be noted that Phase I PWM is facing significant cost overruns, which will be passed onto Cal-Am ratepayers. The CPUC approved a rate of \$1,720 or less per-acre-foot for Phase I PWM water—as of June 2020, M1W stated that at the current projected delivery of 2,030 afy, costs would increase to \$3,678 per-acre-foot. (August 12, 2020 Cal-Am Letter, p. 3.) Even under M1W’s best case scenario, after repairs to the shallow wells, commissioning of deep wells, and the addition of a third deep well, costs would be \$2,508 per acre-foot—a nearly 50 percent increase from the rate approved by the CPUC. (*Ibid.*)

- Moreover, MCWD fails to acknowledge that costs to Cal-Am’s customers for Cal-Am’s Project already have been established by the CPUC based on the capital costs to build the facility, the cost of long-term operations and maintenance, and the cost of financing, and are not materially affected by the per acre-foot cost of water. (See Applicant’s Staff Report, Section IV.O.1.) Based on available information, the CPUC approved a rate increase of about \$37-\$40 per month for the average Cal-Am customer in a single family residence for the desalination facility, and that increase is not tied to per acre-foot water costs. That is why the CPUC found that approving a smaller 4.8 MGD desalination facility would not result in any “significant, if any, cost savings to ratepayers” and determined that alternative was not feasible. (CPCU Decision 18-09-017, p. 129.)
- MCWD asserts that the PWM Expansion is environmentally superior, for purposes of the Commission’s alternatives analysis, because unlike the Project, the PWM Expansion is situated entirely outside the coastal zone. (MCWD Letter, p. 52.)
 - MCWD’s argument is entirely circular—the Commission cannot assess a Project alternative that is situated entirely outside the coastal zone, while simultaneously ignoring any environmental impacts of such a project that take effect outside of the coastal zone. MCWD cannot have its cake and eat it too. The Commission is not authorized to analyze the impacts of projects located outside of its jurisdiction – the coastal zone – and thus, cannot purport to assess the PWM Expansion’s environmental impacts against those of the Project. (See *Sierra Club v. Cal. Coastal Com.* (2005) 35 Cal.4th 839, 860; *Schneider v. Cal. Coastal. Com.* (2006) 140 Cal.App.4th 1339, 1347; June 30, 2020 Cal-Am Letter to Commission, p. 47.)
 - Moreover, MCWD assumes, without any evidence, that projects situated outside of the coastal zone are inherently environmentally superior to projects within the coastal zone. It is a gross overgeneralization to assume that a project located outside the coastal zone has fewer environmental impacts, without first conducting a complete analysis of that project’s effects.
 - Further, to the extent that Coastal Act section 30260 permits the Commission to analyze alternative project locations, such analysis is limited to alternative locations *within* the Commission’s coastal zone jurisdiction. Nothing in the Coastal Act permits the Commission to analyze the relative environmental impacts of siting projects at locations *outside* the coastal zone.
 - MCWD fails to recognize that, with the implementation of proposed special conditions, the Project is consistent with all of the policies set forth in the Coastal Act and the Marina LCP, except for those related to ESHA. (See Applicant’s Staff Report, Section IV.O.1.) Moreover, the Project would incorporate mitigation measures to the maximum extent feasible to reduce impacts to ESHA. (*Ibid.*) In contrast, significant questions regarding the impacts of the PWM Expansion remain unresolved and caused the M1W Board to deny certification of the Final SEIR for the Expansion. (*Ibid.*) Further, M1W has to this point failed

to evaluate the potential impacts from seawater intrusion to the SVGB, should the PWM Expansion be constructed in lieu of the Project. (*Ibid.*) Finally, as explained by the Seaside Groundwater Basin Watermaster, without supplemental supplies that only the Project can provide, the Watermaster cannot maintain adequate groundwater levels in the Basin to “avoid seawater intrusion and irreversible loss of Basin storage.” (See August 12, 2020 Seaside Groundwater Basin Watermaster Letter to Commission, p. 1; see also Applicant’s Staff Report, Section IV.O.2.) Without the additional water to be supplied by the Project, it is likely that seawater intrusion within the Seaside Basin will worsen and cause the loss of available Basin storage, resulting in potentially significant impacts to groundwater resources. (See Applicant’s Staff Report, Section IV.P.) Therefore, substantial evidence does not demonstrate that the Expansion will have fewer environmental impacts compared to the Project.

- MCWD claims that the CPUC’s analysis of the Project in the EIR/EIS is “not relevant” to the Commission’s review of the Project’s environmental impacts under the Coastal Act. (MCWD Letter, p. 52.)
 - As the lead agency, the CPUC reviewed the Project and its environmental impacts over a six-year-long administrative process. Throughout this process, the CPUC engaged federal, state, and local agencies, members of the public, and other stakeholders. Dozens of parties, including MCWD, became parties to the CPUC proceedings, enabling them to participate in legal briefing and oral arguments, join in technical workshops on various Project issues, and offer written and oral evidence taken under oath. When the CPUC issued the Final EIR/EIS, MCWD appealed it to the California Supreme Court, arguing in part that the Project would have adverse environmental impacts. The California Supreme Court found CPUC’s analysis and approval adequate. (Order Denying Petitions for Writ of Review, *Marina Coast Water District, et al. v. Public Utilities Commission*, Case No. S253585 (Aug. 28, 2019).) The analysis set forth in the EIR/EIS is therefore no longer subject to challenge and as such, as a CEQA responsible agency, the Commission is required to consider and rely upon the CPUC’s and EIR/EIS’s evaluation of the Project’s impacts. (See CEQA Guidelines, §§ 15096, subds. (a), (f).) As a responsible agency for the Project, the Commission’s CEQA authority is inherently limited to considering and avoiding only those impacts caused by Project components within the Commission’s coastal zone jurisdiction. (See, e.g., Pub. Res. Code, § 21002.1, subd. (d) [“A responsible agency shall be responsible for considering only the effects of those activities involved in a project which it is required by law to carry out or approve.”]; CEQA Guidelines, §§ 15042, 15096, subd. (g)(1) [“When considering alternatives and mitigation measures, a responsible agency is more limited than a lead agency. A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve.”].)
- In response to Cal-Am’s argument that the PWM Expansion is socially infeasible because it will deprive the disadvantaged community of Salinas of valuable agricultural wash

water, MCWD argues that M1W has made clear that there is not currently any method by which the agricultural wash water can be put to beneficial use by Salinas residents. In the alternative, MCWD contends that M1W has rights to adequate source water for the PWM Expansion without use of agricultural wash water. Finally, MCWD argues that even if the PWM Expansion did rob Salinas residents of agricultural wash water, the Project will cause comparatively more harm to disadvantaged communities by “jeopardizing the sole source of drinking water” for these communities.” (MCWD Letter, pp. 52-53.)

- Salinas continues to dispute M1W’s rights to use the City’s agricultural wash water for the PWM Expansion, and argues that the ARWRA only permits M1W to use agricultural produce wash water for Phase I PWM, and not the Expansion. (January 29, 2020 City of Salinas Letter.) The City further explained that these water sources will not be available for use by the PWM Expansion because “the City fully intends to use available agricultural wash water for its own purposes, including to support farmers, ranchers and the City’s agriculture industry, as determined by the City in its sole and absolute discretion.” (*Id.*, p. 2.) The Commission therefore should not consider the agricultural wash water as an available water source for the Expansion Project.
- MCWD’s contention that M1W has rights to adequate source water for the PWM Expansion, without using agricultural wash water, is incorrect. As discussed in Cal-Am’s Response to Staff Report, the analyses provided by proponents of the PWM Expansion already fail to demonstrate that the Pure Expansion has reliable sources of water necessary to meet demand on the Monterey Peninsula, even when assuming MPWMD’s lowest 10,855 afy demand. (Attachment B, Section J.3.)
- Finally, MCWD’s claim that the Project is “jeopardizing the sole source of drinking water” for Salinas residents is without merit. As discussed in the Applicant’s Staff Report, extensive studies have been performed as part of the Project’s CEQA review before the CPUC, which have concluded that the Project’s well field would have relatively limited effects on nearby groundwater supplies conditions in the SVGB, and negligible or no effect on regional groundwater supplies. (See Applicant’s Staff Report, Section IV.J.) Moreover, the Commission’s own independent hydrogeologist confirmed that Project operation will not adversely affect groundwater supplies. (*Ibid.*)
- MCWD claims that there is no evidence that the PWM Expansion is technically infeasible and that the Phase I PWM “has not faced any ‘technological roadblocks.’” MCWD further claims that there is uncertainty regarding the Project’s proposal to use slant well technology to draw in brackish groundwater for desalination. (MCWD Letter, p. 53.)
 - MCWD’s claim that Phase I PWM has not faced any technological difficulties is simply false. As described above, due to a series of technological issues, including sinkholes and subsidence in the shallow wells and injection refusal in the deep wells, the Phase I PWM’s injection rate continues to be far below the

3,500 afy promised to Cal-Am under its existing WPA with M1W. (See Applicant's Staff Report, Section IV.O.1; see also Attachment B, Section J.2.a; August 12, 2020 Cal-Am Letter, p. 2.)

- Further, MCWD ignores that operation of the Project's test slant well has demonstrated the technical feasibility of slant well technology, and at least two other projects in California have similarly conducted successful tests as a method of supplying source water to desalination facilities. (See Applicant's Staff Report, Section IV.O.1.) Moreover, subsurface slant wells, such as those planned for the Project, are the type of intake technology preferred by the state resources agencies, including the Commission, for desalination facilities under the California Ocean Plan. (See California Ocean Plan, Section III.M.2.d(1)(a).)

3. Use of MCWD Pipeline

- MCWD argues that there is not sufficient capacity in the MCWD pipeline for use to transport Project product water, and that Cal-Am has not demonstrated that it could feasibly construct a product water pipeline running parallel to MCWD's, rendering the Project infeasible. (MCWD Letter, pp. 53-54.)
 - As a threshold matter, the March 10, 2009, Potable Water Wheeling Agreement between Cal-Am and MCWD, as well as Water Code sections 1810-1814, entitle Cal-Am with the legal right to use this shared pipeline while there is sufficient capacity available in the pipeline. (See June 30, 2020 Cal-Am Letter to Commission, pp. 54-55.) This shared pipeline has adequate capacity to serve Cal-Am's uses given that the Project will produce 6.4 mgd of desalinated water and the capacity in the Shared Pipeline is 15.9 mgd on an average day and 14.3 mgd at peak hour. (*Ibid.*) MCWD's arguments to the contrary have been rejected by the CPUC and the California Supreme Court. (See Order Denying Petitions for Writ of Review, *Marina Coast Water District, et al. v. Public Utilities Commission*, Case No. S253585 (Aug. 28, 2019).)
 - In any case, as acknowledged by the Staff Report, in the event that MCWD continues to unreasonably refuse to permit Cal-Am to exercise its right to utilize the pipeline, Cal-Am has proposed to construct an additional product water conveyance pipeline, running parallel to the shared pipeline. (See Staff Report, pp. 112-13; June 30, 2020 Cal-Am Letter to Commission, p. 55.) Approvals for this proposed parallel pipeline will come before MPWMD at its October Board meeting. (See July 31, 2020 MPWMD Board of Directors Final Minutes, p. 1.) There is no reason to believe that MPWMD will not issue approvals for the pipeline. As a result, Cal-Am's ability to utilize the shared pipeline, or to obtain approvals for a new parallel pipeline, will not cause contribute to uncertainty regarding the Project's operations.

4. Supply and Demand

- MCWD claims that Cal-Am’s demand numbers submitted to the CPUC in its general rate case support a finding of decreased demand, and that recent analyses submitted to the Commission support the 2019 Staff Report’s conclusions on supply and demand. (MCWD Letter, pp. 54, 82-83.)
 - MCWD’s contention demonstrates a misunderstanding regarding the purpose of a general rate case, which is to forecast revenue—not plan a long-term water supply system. The rate case is intended to calculate the revenue required for the next three years and propose rates necessary to meet that revenue requirement. To support the calculation, the rate case includes tables used to forecast customers, water sales and operating revenues over that time period. As specifically noted in the 100-day update for Monterey, “There is no forecasted growth in the Central Division due to the Moratorium.” (July 1, 2019 Cal-Am application for CPUC’s General Rate Case A1907004, Exhibit A, p. 302, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M308/K837/308837881.PDF>) Table 3.14 in the update therefore uses the same total annual number of 9,789.4 acre-feet for 2019, 2020, 2021 and 2022. (*Id.* at 317.) Forecasting sales for three years is not the same as planning a water supply system to meet long-term needs, and does not consider issues like maximum month demand – which was a critical factor in the CPUC’s demand determination for the Project. (See Applicant’s Staff Report, Section IV.O.2; CPUC Decision D.18-09-017, pp. 21-24.) A supply that barely met an average annual demand number over a few year period would still be unable to meet maximum demands.
 - MCWD’s contention also ignores the fact that only Cal-Am’s Project can meet Peninsula water demand even under the most conservative demand estimate as presented by MPWMD to the Commission. As demonstrated in the Applicant’s Staff Report, even assuming the low demand figure proposed by MPWMD (10,855 afy), when ASR is accounted for at a realistic level, or when WWTP flows and Reclamation Ditch flows are accounted for based on current flow data, the Pure Water Expansion cannot meet the Peninsula’s water demand. (Applicant’s Staff Report, Section IV.O.2; September 10, 2020 Hazen Memo, p. 6.) When these two scenarios are combined, which is certain to occur, the Peninsula is left in a perpetual water supply deficit that the PWM Expansion cannot satisfy. (*Id.*)

a. CPUC Determinations of Supply and Demand

- MCWD contends that the Commission is not bound by the CPUC’s determination of supply and demand in Cal-Am’s Monterey service area, and can “consider the changes in demand and supply circumstances” since the CPUC issued its decision on the Project in 2018. MCWD claims that MPWMD, instead, should be afforded “greater weight” in its calculations of supply and demand. (MCWD Letter, pp. 54, 55, 82-83.)
 - MCWD’s claims demonstrate a misunderstanding of the law. As Cal-Am explained in its June 30, 2020 Letter to Commission, the CPUC’s determinations of appropriate levels of supply and demand in Cal-Am’s service area cannot now

be second-guessed by the Commission, MPWMD, or any other agency. (See June 30, 2020 Letter to Commission, pp. 56-57.) As previously explained, “[T]he jurisdiction to determine the adequacy of service actually being rendered by a public utility under its franchise is vested exclusively in the [CPUC] when it has elected to determine whether the service is inadequate.” (*California v. Super. Ct.* (1976) 56 Cal.App.3d 399, 408; see also *City of Oakland v. Key System* (1944) 64 Cal.App.2d 427, 435.)

- MCWD claims that these authorities stand only for the proposition that the CPUC is the exclusive agency for determining whether Cal-Am is providing adequate services to its customers—this is a distinction without a difference. By definition, the CPUC cannot determine adequacy of service to a public utility’s customers without determining current and future levels of supply and demand for such public utility. In this case, the CPUC carried out its explicit statutory mandate to determine the adequacy of service in Cal-Am’s service area, and thereby reached binding determinations of supply and demand in the area. The CPUC’s decision has been upheld by the California Supreme Court, and is now final.

b. Critiques of the Stoldt Memo

- Relying on the Mayer Report, MCWD claims that the January Hazen Memo, which Cal-Am used in critiquing the Original Stoldt Memo, contains “numerous errors, mischaracterizations, and incorrect conclusions.” (MCWD Letter, p. 55.)
 - MCWD’s claims regarding the January Hazen Memo are refuted by the August 11, 2020, August 23, and September 10, 2020 Hazen Memos. The August 11, 2020 Hazen Memo explains that the January Hazen Memo was written to reflect the substantial concerns with assuming lower Peninsula water demands that do not adequately analyze the range of uncertainty in water availability in the area. (August 11, 2020 Hazen Memo, p. 16.) The higher demands included in the January Hazen Memo are warranted to provide a buffer for uncertainty, which WaterDM and MPWMD have been unwilling to address. For example, WaterMD and MPWMD have avoided updating the flow data for the PWM Expansion to reflect the project’s actual supply of source water and instead assume that all paper water rights are fully available. (*Ibid.*) Indeed, as a matter of good engineering principles, supply and demand planning for the Monterey Peninsula, which is continuously dependent on new sources of water, requires planners to analyze these risks and apply an appropriate level of reliability and resiliency. (*Ibid.*) In contrast, it is MPWMD and WaterDM’s analyses that rely on outdated and inaccurate flow data for the PWM Expansion, overestimate the availability of ASR water, and presume increased water conservation without the implementation of more stringent measures, which actually contain “numerous errors, mischaracterizations, and incorrect conclusions.” (See MCWD Letter, p. 55.)
 - If there was any doubt as to the veracity of the January Hazen Memo, those concerns were dispelled when M1W released the post-2013 wastewater flow

information that was absent from the PWM Expansion's Final SEIR. Using this new information, Hazen and Sawyer confirmed their prior conclusion that "there is not enough wastewater flow to support the WM Phase One and the PWM Expansion as a reliable source of water supply for the Peninsula." (August 23, 2020 Hazen Memo, p. 3.)

- Finally, in Response to the Staff Report, Hazen and Sawyer provided additional analysis, including Appendix A, which offers a comprehensive accounting of water supply and demand on the Monterey Peninsula, accounting for different scenarios based on the variability in Cal-Am's water supply. Like Hazen and Sawyer's prior analyses, Appendix A demonstrates that when ASR supplies are described at reasonable levels, the PWM Expansion cannot meet the lowest demand estimates set forth by the MPWMD of 10,855 afy. Similarly, when WWTP and Reclamation Ditch flows to the Phase I PWM and PWM Expansion are reduced to account for recent data, the Expansion cannot meet the lowest estimate of demand in Cal-Am's service area. (September 10, 2020 Hazen Memo, p. 6.)

c. The Stoldt Memo's Supply and Demand Estimates

- MCWD argues that the Stoldt Memo's demand estimates, and the 2019 Staff Report's reliance on such estimates, were reasonable, and claims that the Supreme Court's rejection of MCWD's and Marina's challenges to the CPUC's decision do not "freeze" customer demand. Rather, MCWD claims that whether the Commission can revisit the CPUC's determination of supply and demand is controlled by a "three-part test" set forth in *San Diego Gas & Electric Co. v. Superior Court* ("*Covalt*") (1996) 13 Cal.4th 893. (MCWD Letter, pp. 55-56.)
 - MCWD does not explain the relevance of the *Covalt* case, nor does this case appear to provide any support for the proposition that the Commission can override the CPUC's binding determinations of supply and demand in Cal-Am's service area. Rather, *Covalt* is concerned with whether Public Utilities Code section 1759, which vests exclusive jurisdiction in the California Supreme Court and the courts of appeal to review any determination by the CPUC, permits a private plaintiff to file an action for damages against an electrical utility. (See 13 Cal.4th at p. 903.)
- MCWD claims that the CPUC's determinations of future supply and demand are outdated and inflated, and argues that the Mayer Report's estimates of supply and demand for 2040 (between 10,412 and 10,983 afy) are based upon AMBAG estimates of future population growth. (MCWD Letter, p. 56.)
 - As discussed above, the CPUC's determinations of supply and demand in the Cal-Am service area are binding and cannot now be second-guessed by MCWD, the Commission, or any other entity. (*California v. Super. Ct.*, *supra*, 56 Cal.App.3d at p. 408; *Key System*, *supra*, 64 Cal.App.2d at p. 435; see also June 30, 2020 Letter to Commission, pp. 56-57.)

- With respect to the Mayer Report's estimate of future demand based upon AMBAG future population growth, MCWD fails to explain why such a method would yield more accurate projections of future demand than the methodology utilized by the CPUC, which required specific and thorough determinations of future supply based upon demand associated with Pebble Beach buildout, projected economic recovery, and existing legal lots of record. (CPUC Decision D.18-09-017, pp. 50-51.)
 - By generalizing based upon broad AMBAG growth projections, the Mayer Report fails to account for these factors specific to Cal-Am's service area, including the above facets of future demand assessed by the CPUC, and artificial demand depression caused by the moratorium on new service connections.
 - Moreover, as stated by the City of Monterey, projecting future demand based upon AMBAG population growth is improper—AMBAG's growth scenario, established six years ago, does not consider current and future legislative mandates to increase affordable housing construction. (February 4, 2020 City of Monterey Letter to MPWMD, p. 1.)
- MCWD argues that while Cal-Am's customers have already reduced their annual water use by 30 percent, the Mayer Report demonstrates that Cal-Am customers can further reduce their consumption by 0.26 percent annually, resulting in a further decrease in demand. (MCWD Letter, p. 83.)
 - Any argument that Cal-Am customers can further reduce their water usage below already historically-low levels is not only wholly speculative, it unreasonably assumes that existing water conservation measures will result in increased conservation without the implementation of more stringent measures, such as moratoriums and water rationing. (August 11, 2020 Hazen Memo, p. 17.)
 - Cal-Am has already heavily invested in water conservation programs, as well as funding research into water loss and loss detection in order to cut water usage. (*Ibid.*) Cal-Am's customers are considered some of the most water efficient users in the State of California. (See CPUC Decision D.18-09-017, p. 28; June 30, 2020 Letter to Commission, p. 99.)
 - MCWD and the Mayer Report ignore the fact that the Project was specifically designed to obviate the need to implement even more stringent water conservation measures, which would put additional strain on Cal-Am's customers, Peninsula businesses, the local and regional economy, and the ability to meet state-mandated housing goals.

d. Stoldt's Prior Statements

- MCWD attempts to dismiss the fact that Stoldt has adopted conflicting positions of Peninsula supply and demand over time, attributing these positions to “changing circumstances.” (MCWD Letter, p. 56.)
 - As discussed in Cal-Am’s June 30, 2020 Letter to Commission, MPWMD General Manager Stoldt has developed a track record of taking inconsistent positions regarding Monterey Peninsula water demands depending on the circumstances and as described in further detail below, provided the Commission with a manipulated memorandum intended to bolster his recent positions regarding Peninsula supply and demand. (See June 30, 2020 Letter to Commission, p. 60.) For example, although the Stoldt Memo asserts that Monterey Peninsula demand estimates should be reduced due to implementation of various water conservation efforts, which Stoldt argues represent a permanent reduction in demand, Stoldt previously argued that recent decreases in demand should not be used to justify reductions in Cal-Am’s diversion limits, because these reductions were likely due to extensive water conservation campaigns that could not be assumed permanent. (*Ibid.*) Likewise, in a series of emails regarding the State Water Board proceedings, Stoldt argued that depressed demand levels seen in recent years cannot be used to justify reductions in Cal-Am’s diversions from the Carmel River because drought awareness and corresponding cuts in water were likely to fade, economic activity on the Peninsula had been cut due to implementation of the CDO, and demand rebounds were likely once drought conditions abate. (*Ibid.*) The Stoldt Memo is based on the exact opposite assumptions. These contradictions demonstrate that the only “changing circumstance” that explains Stoldt’s conflicting water demand reasoning is an intent to frustrate Cal-Am’s Project. As a result, it is inappropriate to rely on the Stoldt Memo, particularly where supply and demand already has been evaluated and determined through an unbiased, public evidentiary process before the CPUC.

e. PWM Expansion and Maximum Month Demand

- MCWD argues that implementation of the PWM Expansion, without the Project, will provide sufficient water to meet maximum month demand in Cal-Am’s Monterey Service area. MCWD further contends, based on the Mayer Report, that Cal-Am “confuses peak capacity operations calculations” with “planning for an adequate future water supply on an annual basis.” MCWD argues that regulations requiring calculations of peak capacity do not apply to estimates of current and future annual demand. (MCWD Letter, p. 56.)
 - As discussed in the Applicant’s Staff Report, the proper way to ensure adequate capacity is by calculating demand based on maximum month demand, as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)). (Applicant’s Staff Report, Section IV.O.2.) MPWMD’s conclusion that the Pure Water Expansion can meet maximum daily demands and peak hourly demand relies on the availability of drought reserves to meet such demand. However, MPWMD also assumes that no drought conditions will occur on the Monterey Peninsula between now and 2034, allowing for the buildup of such

reserves. This assumption is untenable in light of the fact that California has experienced a drought in every decade over the last century, and recharge of groundwater reserves is essentially unavailable under drought conditions. (*Ibid.*) Moreover, as Hazen and Sawyer have explained, MPWMD focused on the distinction between maximum day demand and annual demand, but avoids assessing the long-term historical data in determining future demands for the Monterey Peninsula. (See August 11, 2020 Hazen Memo, p. 16.) In any case, even when using the most conservative 10,855 afy demand projection prepared by MPWMD, which was not calculated based on maximum month demand, only Cal-Am's Project would be able to meet demand in Cal-Am's service territory. (See Applicant's Staff Report Section IV.O.2; September 10, 2020 Hazen Memo, p. 6.)

- MCWD claims that Cal-Am currently has sufficient available supplies to manage its peak demand periods, even if Cal-Am does not have an additional supply by 2022. (MCWD Letter, pp. 56-57, 74, 83.)
 - MCWD does not provide any evidence to support this claim, and ignores the CDO deadlines. Moreover, MCWD's argument ignores serious concerns over the reliability of Cal-Am's existing water supplies. The concerns are addressed in detail in Applicant's Staff Report, Section IV.O.2, and demonstrated in the September 10, 2020 Hazen Memo, Appendix A, but are summarized below.
 - First, the ASR has not proven itself capable of building up a drought reserve to consistently deliver 1,300 acre-feet, and for the last 15 years, average annual storage of ASR is approximately 138 afy, with average annual storage of ASR at 352 afy over the last five years. These amounts are not sufficient storage to provide 1,300 acre-feet annually over a multi-year drought. Therefore, Cal-Am cannot rely on ASR to meet peak demand periods. (See Applicant's Staff Report, Section IV.O.2; September 10, 2020 Hazen Memo, Appx. A.)
 - Second, due to technical issues and decreasing wastewater flows, PWM Phase I cannot be relied upon to supply Cal-Am's service with the currently projected 3,500 afy. (See Applicant's Staff Report, Sections IV.O.1, 2; September 10, 2020 Hazen Memo, Appx. A.) In fact, due to technical issues regarding PWM Phase I's injection wells, PWM Phase I is currently only capable of producing 2,030 afy, which is less than 58 percent of the 3,500 afy the project was intended to produce. (See Applicant's Staff Report, Section IV.O.1, 2.) Additionally, as discussed above, decreasing source water flows for PWM Phase I cast further doubt on the project's ability to supply the Peninsula. (See *ibid.*; September 10, 2020 Hazen Memo, Appx. A.) Due to this trend, PWM Phase I does not offer a reliable source of water for Cal-Am to meet peak demands.
 - Finally, MCWD claims that Cal-Am will have sufficient water supplies provided it can prudently manage the Seaside Groundwater Basin storage

capacity. (MCWD Letter, pp. 56-57.) This argument ignores the fact that in 2019, the Seaside Groundwater Basin Watermaster, which is tasked with protecting and managing the Basin, identified the Project as “the only project before [it] that will protect the Seaside basin” by replenishing the Basin and ensuring that protective water levels are maintained. (October 4, 2019 Seaside Groundwater Basin Watermaster Letter to Commission.) On August 12, 2020, the Watermaster echoed its support for the Project, finding that “the MPWSP is necessary to meet the long-term water demands of the Monterey Peninsula,” and “[n]o other project has been identified to reliably meet the communities’ water needs sufficiently to get the community out from under the State Water Board’s Cease and Desist Order.” (August 12, 2020 Seaside Groundwater Basin Watermaster Letter to Commission, p. 1.) This is because the Watermaster concluded that the Basin will require replenishment of an additional 1,000 afy over the next 25 years in order to achieve protective water levels. (*Id.*, p. 2.) As a result, Cal-Am will likely be forced to withdraw less than the 744 afy from the Basin that it is currently entitled to. (Applicant’s Staff Report, Section IV.O.2.) Water from the Seaside Basin simply cannot be relied upon for Cal-Am to meet peak demand periods as MCWD claims.

f. ASR Water Supplies

- MCWD claims that Cal-Am’s arguments regarding unreliability of ASR water supplies is “misleading,” asserting that: (1) the CPUC’s 2016 approval of the new Monterey Pipeline means that only water year 2016-2017 and later should be considered in analyzing ASR recovery volumes and (2) that Cal-Am’s ASR permits 20808A and 20808C permit it to withdraw up to 5,326 afy, and are estimated to yield an average of 1,920 afy for injection. MCWD therefore contends that an average ASR injection and recovery rate of 1,300 afy is “reasonable.” (MCWD Letter, p. 57.)
 - MCWD’s claim that ASR permits 20808A and 20808C are estimated to yield an average of 1,920 afy for injection ignores the fact that the face values of these permits have been the same since the ASR permits were first issued, but the ability to actually divert water to ASR is conditioned. As a result, the ability for Cal-Am to withdraw water under these permits should be based on historic diversion numbers, not the entitlements established by the permits. Paper water is not sufficient to supply the Peninsula. Water rights must result in actual water flows.
 - The Mayer Report’s projection of drought conditions only occurring one year out of five is wholly unreasonable and ignores changing conditions in California, including global climate change. Indeed, as Hazen and Sawyer explained, ASR water availability is reduced to 63 percent in a single dry year and further reduced to 4 percent following three consecutive dry years, which means that ASR does not meet Water Code reliability standards (five consecutive historic driest years) or Governor Newsom’s 2020 Water Resilience Portfolio (consideration of a drought lasting six years). (August 11, 2020 Hazen Memo, pp. 5.)

- The actual data surrounding ASR speaks for itself. Over the past 15 years, ASR has stored an average of 138 acre-feet annually. Over 15 years, there is only 700 acre-feet claimed as stored—and only twice has the system injected more than the 1,300 afy claimed by MPWMD. (August 11, 2020 Hazen Memo, pp. 5, 19.)
- MCWD also contends that storage data after the CPUC’s 2016 approval of the Monterey Pipeline should be considered. While there is no requirement to limit review of ASR historical information, data from the last five years reveals that average annual storage of ASR is still only 352 afy. (August 11, 2020 Hazen Memo, pp. 5; Applicant’s Staff Report, Section IV.O.2.) This does not change Hazen’s conclusions about the availability of ASR as a water supply, particularly in drought years.
- Indeed, as shown in Appendix A of the September 10, 2020 Hazen Memo, when ASR supplies are described at reasonable levels, the PWM Expansion cannot meet even the lowest demand estimates set forth by the Stoldt Memos of 10,855 afy. (September 10, 2020 Hazen Memo, Appx. A.)

g. PWM Expansion Ability to Meet Regional Housing Goals

- MCWD argues that the 190 afy required to meet regional housing goals is accounted for in the Mayer Report. MCWD therefore concludes that the PWM Expansion can provide a supply sufficient to meet regional housing goals. (MCWD Letter, pp. 57-58.)
 - As discussed above, the CPUC has already made binding determinations of Monterey Peninsula supply and demand, and the Mayer Report fails to demonstrate that Peninsula supply, with PWM Expansion but without the Project, can meet this demand. In reality, only the Project can provide an adequate, reliable, and permanent supply to ensure that regional housing requirements are met. Assuming it functions properly at all times, the PWM Expansion can only meet current water demands, without reasonable growth. (See August 11, 2020 Hazen Memo, pp. 5-6.) PWM Expansion is simply incapable of providing the additional 190 afy that MPWMD concedes is necessary to meet the Peninsula’s RHNA goals.
 - Moreover, the 190 afy figure quoted by MCWD substantially understates the water required to meet demand related to regional housing goals.
 - The City of Monterey projects a need for 1,700 additional housing units by 2030, which represents a need for an additional 255 afy—which is 75 percent more than the need projected by MPWMD and quoted by MCWD for the entire region. (See February 4, 2020 City of Monterey Letter to MPWMD, p. 1.)
 - This 255 afy figure is just for one Peninsula city—including actual housing projections from other cities on the Peninsula only further increases the actual amount of water needed for housing. New RHNA

numbers for the Monterey Peninsula will be released in December 2023 and are anticipated to include substantial increases in required housing because of the State's ongoing housing crisis. Indeed, the Bay Area's updated RHNA, issued in June 2020, reflects a 135 percent increase in required housing over the previous period.¹⁵ There is no scenario under which PWM Expansion can provide the water supply needed for this housing.

- Moreover, the recently enacted provisions of the Housing Accountability Act and Housing Crisis Act provide for stricter enforcement of affordable housing goals throughout California. (See Cal. Gov. Code §§ 65589.5, subds., (d), (f)(1), (k)(1), 66300, et seq.) As such, there is an additional onus on Peninsula governments to construct significant additional affordable housing, and ensure that there is an adequate water supply available for that housing.
- Finally, there is currently a moratorium on new service connections on the Monterey Peninsula—this effectively prohibits the construction of additional affordable housing, which would create new water demand. If an adequate water supply is not secured and the moratorium is not lifted, no additional water will be made available for housing growth. Notably, even with the moratorium in place, housing-related demand for water on the Monterey Peninsula continues to grow.
 - In response to a request from MPWMD, several Monterey Peninsula cities provided projections for near-term housing water needs from the Cal-Am system—given that the CDO remains in place, these projections are related solely to metered properties. (See August 4, 2020 MPWMD Policy Advisory Committee Action Items, p. 1.) In response, the responding cities projected a need for an additional 88-95 afy for metered properties—as noted by MPWMD, this total does not include several key jurisdictions. (*Ibid.*) As a result, MPWMD is seeking 75 afy of relief from the CDO to accommodate this demand from the cities. (*Ibid.*) Plainly, housing-related need for water will only continue to grow, and only a new permanent water supply, with demonstrable ability to meet the needs in Cal-Am's service area, will lift the CDO and moratorium. Such demand from population growth is reflected in MCWD's own 2020 Water Master Plan, which shows that MCWD's average annual demand is expected to nearly double by 2042.¹⁶ The PWM Expansion is not a

¹⁵ The Regional Housing Needs Determination from the Association of Bay Area Governments is available here: [https://www.hcd.ca.gov/community-development/housing-element/docs/ABAGRHNA-Final060920\(r\).pdf](https://www.hcd.ca.gov/community-development/housing-element/docs/ABAGRHNA-Final060920(r).pdf).

¹⁶ Marina Coast Water District Water Master Plan, May 2020, Table 5.5, available at: https://www.mcwd.org/docs/engr_files/master_plans/MCWD_WaterMasterPlan_Final_052920.pdf.

permanent water supply, nor is it adequate to provide water to satisfy state-mandated housing needs.

h. Stoldt's Doctored Memo

- MCWD calls Cal-Am's arguments regarding the exhibit doctored by Stoldt that was used in the 2019 Staff Report "frankly ridiculous." MCWD refers to a letter from its own President to support its claim that Stoldt's doctored memo was "properly based on currently available information." (MCWD Letter, p. 58.)
 - Despite MCWD's apparent indignation, the fact remains that MPWMD General Manager Stoldt modified a draft technical memorandum prepared as an exhibit to the PWM Expansion Draft SEIR without identifying his modifications as changes to the original, in order to support the 2019 Staff Report's claims regarding ASR supply. (See June 30, 2020 Letter to Commission, p. 63.) As previously explained, it appears that Stoldt intentionally manipulated the technical memorandum to make it appear that the memorandum's authors had concluded that the ASR reserve could provide a supply to withstand a four-year drought by 2034. (*Ibid.*) Stoldt's efforts to manipulate the draft technical memorandum, and the conclusions that he added thereto, remain improper, and should not have been used by Commission staff to bolster unsupportable claims regarding the viability of ASR supplies. (*Ibid.*)

5. PWM Expansion Conformity to Project Objectives

- MCWD argues that the PWM Expansion is the only alternative capable of meeting all primary and secondary project objectives, and that most Project objectives can be met even by a No Action alternative. MCWD claims that current supplies should be sufficient to meet demand from Cal-Am's customers for at least the next ten years. (MCWD Letter, pp. 58-59.)
 - As explained in Cal-Am's June 30, 2020 letter to the Commission, the PWM Expansion is not capable of satisfying the Project objectives, and therefore cannot be a feasible alternative to the Project. (June 30, 2020 Letter to Commission, pp. 63-68; see Attachment B, Section J.4.) The fact remains that the PWM Expansion does not provide enough water to meet the CPUC-determined levels of demand in Cal-Am's Monterey District service area, an essential prerequisite to satisfying most of the Project objectives. (See *id.*, pp. 63-67; see also October 15, 2019 Cal-Am Letter; January 2020 Hazen Memo.)
 - Moreover, even under the depressed demand estimates put forward by Stoldt and MCWD, Peninsula water supply with the PWM Expansion, but without the Project, would barely suffice to meet current demand assuming all water supplies are working perfectly – which is wholly unrealistic. (June 30, 2020 Letter to Commission, pp. 58-60; see Applicant's Staff Report, Section IV.O.2.) Again, as explained by the CPUC, the PWM Expansion would satisfy the basic purposes of the

Project “*only in conjunction with construction of a desalination plant of some size within five to fifteen years*” and would merely delay the necessary implementation of a desalination project of some size. (CPUC Decision D.18-09-017, Appx. C, p. C-71 [emphasis added].)

- With respect to the claim that the Project cannot meet the primary project objectives due to MCWD’s intransigence regarding Cal-Am’s use of the shared pipeline, existing permits clearly permit Cal-Am to utilize the pipeline, and the pipeline has ample excess capacity to convey Project water. (See June 30, 2020 Cal-Am Letter to Commission, pp. 54-55.) Regardless, if needed, Cal-Am may construct an additional, parallel pipeline to convey Project water—approvals for that potential parallel pipeline will come before MPWMD in October 2020. (See Applicant’s Staff Report, Section IV.O.3.)
- MCWD’s claim that the PWM Expansion can satisfy Project objectives, and that compliance with Carmel River diversion limits and Seaside Basin pumping limits can be satisfied even without a new supply, assumes that both ASR and Phase I PWM operate at full capacity at all times. Given the significant shortfalls in ASR injection in Dry years, and the current deficiencies in Phase I PWM treatment and injection of product water, this assumption is wholly untenable. (See August 11, 2020 Hazen Memo, pp. 6, 17.) Even with full ASR, Phase I PWM, and PWM Expansion supplies, Peninsula water supplies would barely suffice to meet Stoldt’s low demand estimates and would place Cal-Am’s customers at serious risk if any one of these supplies should fail. (*Id.*, p. 6.)
- On the contrary, the Project is the only proposed water supply solution that is capable of providing the Cal-Am service area with reliable and sustainable water supplies across a series of probable scenarios, including prolonged drought conditions, limited wastewater flows, deficient Phase I PWM injection, limited agricultural drain flows, flows from the Sand City Desalination Plant, and potentially deficient flows from ASR supplies. (Applicant’s Staff Report, Section IV.O.2; September 10, 2020 Hazen Memo, Appx. A [demonstrating that when ASR supplies are described at reasonable levels or WWTP and Reclamation Ditch flows to the Phase I PWM and PWM Expansion are reduced to account for recent data, the Expansion cannot meet even the lowest estimate of demand in Cal-Am’s service area].)
- MCWD again turns to the status of the PWM Expansion, claiming that M1W has shown that adequate source water supplies are available, and that the PWM Expansion Final SEIR remains “substantially complete,” such that the PWM Expansion can move forward when the M1W Board is prepared to take up the matter again. (MCWD Letter, p. 59.)
 - MCWD’s claim that the PWM Expansion is ready to move forward at a moment’s notice is divorced from reality. In truth, significant doubts remain as to the PWM Expansion’s feasibility.

- First, contrary to MCWD’s assertions, source water for the Expansion is anything but secure, and the claimed “water rights” for the Expansion consist mainly of interruptible use entitlements, many of which are disputed by the actual holders of the water rights. (August 12, 2020 Cal-Am Letter, p. 4.) Significant evidence demonstrates that M1W drastically overestimates the availability of source waters for the PWM Expansion. (See Applicant’s Staff Report, Section IV.O.2.)
 - Moreover, wastewater flows, upon which the PWM Expansion would heavily rely, have been decreasing steadily in recent years, and analyses by Hazen & Sawyer demonstrate that WWTP flows to the PWM Expansion would be heavily depressed in Normal/Wet years, and flows to Phase I PWM and the PWM Expansion would be completely unavailable in Dry years. (August 23, 2020 Hazen Memo, p. 6.) Recent wastewater flow data provided by M1W only supports these conclusions.
- Further, there is no evidence that M1W can simply approve the PWM Expansion at a moment’s notice. (See Applicant’s Staff Report, Section IV.O.1; Section B.2, *supra*.) In truth, there remain significant deficiencies in the Final SEIR for the PWM Expansion, and M1W currently lacks the funding to correct these flaws. (See May 20, 2020 M1W Board of Directors Staff Report, p. 1.) M1W staff have also been ordered to cease any work on the PWM Expansion. (See August 20, 2020 M1W Letter, p. 3.) There is no reason to believe that the PWM Expansion Final SEIR, and therefore the Expansion itself, will be approved at any time in the near future.
- MCWD argues that there remains significant doubt in the Project’s construction schedule due to: (1) issues related to a Project source water pipeline, (2) a lack of a CDP for the brine outfall liner, and (3) a lack of a right to pump source water for the Project and related litigation of Cal-Am’s water rights. (MCWD Letter, p. 59.)
 - As discussed above, Cal-Am’s existing agreements permit it to utilize the shared pipeline with MCWD, and there is sufficient capacity in the pipeline to accommodate Project water. (See June 30, 2020 Cal-Am Letter to Commission, pp. 54-55.) Moreover, Cal-Am remains able to pursue construction of a parallel Project water pipeline, if MCWD continues to refuse to honor its agreements regarding the shared pipeline.
 - With respect to the M1W outfall, Cal-Am has proposed an updated liner installation method, whereby Cal-Am would install a spray-on liner from within the pipeline itself. (See August 18, 2020 Cal-Am Letter to Commission.) This method would involve no ground disturbance within the Coastal Zone of the City of Marina or the County, and therefore would not require Cal-Am to obtain a CDP. In fact, Cal-Am has proposed Special Condition 4 would require Cal-Am to implement this proposed spray-lining method prior to the commencement of Project operations since it is a feasible alternative. (See Applicant’s Staff Report, Section IV.F.) This would guarantee that the outfall liner work will result in no

adverse impacts to environmentally sensitive habitat areas, and therefore this future Project component does not raise substantial concerns regarding Project certainty.

- Finally, Cal-Am's rights to Project source water will have no impact on the Project's construction schedule. The EIR/EIS has already examined Cal-Am's potential water rights to the Project, and determined that Cal-Am could develop appropriative rights to that portion of the Project's source water that will be extracted from the Salinas Valley Groundwater Basin. (See June 30, 2020 Cal-Am Letter to Commission, p. 26; Final EIR/EIS, pp. 2-32 to 2-34.)
 - Moreover, in 2013, the State Water Board, the agency charged with primary responsibility for regulating state water resources (Water Code, § 174; Pub. Resources Code, § 30412), determined that Cal-Am can develop all necessary water rights to operate the Project. (See June 30, 2020 Letter to Commission, pp. 26-27; CPUC Decision D.18-09-017, p. 80.) Despite MCWD's allegations, and the City of Marina's frivolous lawsuit, Cal-Am's ability to develop water rights to Project feedwater do not pose any barrier to Project implementation.
- MCWD argues that Cal-Am's "recalcitrance" in following the CPUC's order to consider PWM Expansion if the Project is delayed, along with its "unwillingness" to discuss the terms of a purchase agreement for PWM Expansion water, constitute the primary barrier to PWM Expansion implementation. (MCWD Letter, pp. 59-60.)
 - MCWD blatantly ignores the myriad flaws in both the PWM Expansion and the Phase I PWM, including a lack of secure water rights for Expansion source water, the numerous technical difficulties faced during Phase I PWM construction and startup, and the fact that work on the PWM Expansion has ceased completely and that project is now indefinitely delayed. (See Attachment B, Section J.2.)
 - Further, MCWD's claims of Cal-Am's recalcitrance in following the CPUC's orders with respect to the PWM Expansion are unfounded. In truth, Cal-Am has met with M1W and MPWMD on multiple occasions to discuss a WPA for PWM Expansion product water. (See Applicant's Staff Report, Exhibit 30, p. 1.)
 - However, Cal-Am determined that it would not, at that time, pursue a WPA for PWM Expansion water, given significant uncertainties in Expansion source water availability, environmental impacts, permitting requirements, source water, funding, and product water pricing. (*Id.*, p. 2.) MCWD provides no additional evidence to demonstrate that Cal-Am is "unwilling" to discuss a WPA for PWM Expansion water, should the Expansion somehow prove to be a feasible source of water to the Monterey Peninsula.
 - Moreover, any WPA for the PWM Expansion would be required to include more stringent performance guarantees to provide adequate assurances to Cal-Am and

its customers that the Expansion water would be produced as promised, and greater protections in the event that Expansion water is not or cannot be produced at necessary levels to meet the Peninsula's water demand. (See Applicant's Staff Report, Section IV.O.2.) Such performance guarantees would include a guarantee of the full production volume of PWM Expansion water, and a full indemnification for Cal-Am against any risk, liability, or penalties in the event that the PWM Expansion fails to provide an adequate water supply. (*Ibid.*; see also May 9, 2020 Cal-Am Letter to M1W, p. 5.) In the absence of such guarantees, Cal-Am would be forced to bear the risk of the PWM Expansion not meeting its supply promises, which could cause Cal-Am to draw additional water from the Carmel River resulting in substantial penalties. (See Applicant's Staff Report, IV.O.3.)

6. Overall Adverse Project Effects

- MCWD claims that the Commission is not bound by the CPUC's analysis of the Project's environmental impacts in the EIR/EIS. (MCWD Letter, p. 60.) As discussed above, as a CEQA responsible agency, the Commission is required to consider the CPUC's—the lead agency—analysis of the Project's environmental impacts. (See Section I.2.c; see also CEQA Guidelines, §§ 15096, subds. (a), (f).)
- MCWD argues that even if neither the Project nor the PWM Expansion is implemented by January 1, 2022, Cal-Am may still comply with the legal limit on its Carmel River withdrawals, even without an extension of the CDO. (MCWD Letter, pp. 60, 74, 83.) MCWD further argues that the No Action alternative and the PWM Expansion would result in fewer adverse impacts than the Project (*Ibid.*)
 - For the reasons discussed in Applicant's Staff Report, Section IV.O.2, MCWD's statement that Cal-Am can meet its water supply obligations without a supplemental supply is simply false. Additionally, as explained in an August 12, 2020 letter submitted to the Commission by the Seaside Groundwater Basin Watermaster, if no action is taken (i.e., neither the proposed Project nor the PWM Expansion is adopted), protective water levels will not be achieved and the Seaside Groundwater Basin will not be protected against seawater intrusion. (August 12, 2020 Seaside Watermaster Letter, p. 4.) An additional 1,000 acre-feet of replenishment water is needed to prevent seawater intrusion in the Paso Robles and Santa Margarita Aquifers. (August 12, 2020 Seaside Watermaster Letter, p. 4.) This additional supply is critical to achieving protective water levels in the Seaside Basin, and cannot be achieved without the implementation of reliable, long-term water supply. As such, the Watermaster expressly concluded that the Project "is the only possible supplemental water project . . . that is capable of providing the additional water supply" needed to protect the Basin. (*Ibid.*) Further, the Watermaster determined that "[w]ithout the quantities of supplemental supplies from the [Project], CAW and other Seaside Basin pumpers may not be able to meet the pumping reductions called for in the Seaside Basin Decision." (*Id.*, p. 3.)

- MCWD contends that the Project faces a greater risk of delay than the PWM Expansion, arguing that the Phase I PWM is on track to deliver the planned total of 3,700 afy once shallow wells have stabilized and third deep well has been installed. (MCWD Letter, p. 60.)
 - MCWD fails to acknowledge significant, ongoing technical deficiencies in the Phase I PWM, as well as the overwhelming likelihood that the PWM Expansion will face similar barriers to construction and operation. (See Attachment B, Section J.2.a.)
 - As explained above, sinkholes and subsidence are affecting the Phase I PWM shallow wells, and these wells are not currently injecting any water and are likely to only ever operate at 25 percent capacity. (August 12, 2020 Cal-Am Letter, p. 2.)
 - Moreover, Phase I PWM deep injection wells are only operating at rates of 70 percent or less due to injection refusal, and therefore M1W estimates that current annual injection volume for Phase I PWM will only be 2,030 afy, or less than 58 percent of the 3,500 afy allocated to Cal-Am. (*Ibid.*)
 - Solutions proposed by M1W to address these technical flaws—repairs to shallow wells, final commissioning of deep wells, and construction of a third well which will not begin until November 2020—would increase Phase I PWM project costs by as much as \$13 million. (*Ibid.*) Most recently, M1W has identified the probable need for a fourth deep well, the timing of which remains uncertain. (See August 31, 2020 M1W Board of Directors Meeting, at 1:14:20 to 1:22:10 [discussing amending bid request for the third deep injection well to include construction of a fourth deep injection well], available at <https://montereyonewater.org/290/Audio-Recordings-of-Board>.)
 - Finally, some source waters for Phase I PWM, including critical agricultural wash water, have not been used since startup and present additional technical challenges. (*Ibid.*)
 - The Phase I PWM will clearly continue to experience significant delays and cost overruns, and there is every reason to believe that the PWM Expansion will face similar barriers to implementation. MCWD’s claims that the Project will face greater delays than the PWM projects ignore these realities.

7. **“No Action” Alternative**

- MCWD argues that if the Commission denied Cal-Am’s application, Cal-Am would likely pursue the PWM Expansion, and that this would be a reasonable outcome. (MCWD Letter, p. 61.) As discussed in the Applicant’s Staff Report, Section IV.O, the PWM Expansion is not a feasible alternative.

- MCWD further argues that under a No Action alternative, as a result of Cal-Am’s customer’s conservation efforts and an expanded ASR project with MPWMD, Cal-Am is capable of supplying its customers’ needs for the next decade, while still complying with the State Water Board CDO. (MCWD Letter, p. 61.)
 - As discussed in the Applicant’s Staff Report, Section IV.O.2, despite its ratepayers’ conservation efforts, Cal-Am will be at a significant deficit without a new supply without the adoption of the proposed Project. The no action alternative is not feasible for the same reasons the PWM Expansion is not feasible. (See Applicant’s Staff Report, Section IV.O.5.) Only Cal-Am’s Project is capable of providing an adequate water supply to meet current and expected future demands and allow the water system to conform to the state’s design and capacity requirements. Other supplies relied upon by MCWD and other project opponents, including ASR supplies, are not reliable – particularly in times of drought – and cannot be counted on to provide the necessary water supplies to serve even MPWMD’s demand projections for Cal-Am’s service area. (See *id.*, Section IV.O.2.)

8. Alternative Slant Well Locations

- MCWD argues that “feasible alternative location and technologies” for intake wells exist and should be considered that will reduce impacts to ESHA and groundwater and will be located outside the coastal zone. (MCWD Letter, p. 75.)
 - MCWD ignores the fact that the EIR/EIS already considered, and rejected, alternative intake well locations, and concluded that locating the Project’s slant wells at the CEMEX site is the environmentally superior alternative. No new information has been provided that would change the CPUC’s conclusion.
 - As explained in Cal-Am’s responses to questions posed by Commissioners at the November 14, 2019 Commission hearing on the Project, the EIR/EIS and the CPUC examined the feasibility of constructing intake systems at both the Moss Landing and Potrero Road sites. (See June 30, 2020 Cal-Am Letter to Commission, pp. 84-86.)
 - In both cases, the EIR/EIS found the alternative intake systems to be infeasible—a slant well system located at Potrero Road would draw excessive quantities of groundwater from the Salinas Valley Groundwater Basin and would result in significant and unavoidable impacts to marine and terrestrial biological resources due to capture of groundwater that would otherwise flow into Elkhorn Slough, while locating open ocean intakes at Moss Landing would result in increased impacts to marine habitat and biological resources related to intake construction and operation, as compared to the Project. (Final EIR/EIS, pp. 5.4-14, 5.4-19, 5.4-21, 5.4-39, 5.4-50, 5.6-4, 5.6-6.)

- Given these increased impacts, the EIR/EIS concluded that siting intake systems at either Potrero Road or the Moss Landing Site would not “offer an overall environmental advantage over the proposed project,” and thereafter selected the Project, with a slant well system at the CEMEX site, as the environmentally superior alternative. (*Id.*, pp. 5.6-6, 5.6-8.) The CPUC affirmed this decision, concluding that no Project alternatives are feasible, capable of meeting Project objectives, or reducing significant Project-related impacts. (CPUC Decision D.18-09-017, pp. 79-80.)
 - Moreover, despite its claims that feasible alternative locations and technologies for the Project’s slant wells exist, MCWD fails to identify **any** possible locations outside of the coastal zone where Cal-Am could feasibly locate a subsurface intake system.
 - Finally, even ignoring the EIR/EIS’s thorough evaluation of alternative Project intake technologies and sites, an agency need not consider “every conceivable alternative” to a project. (CEQA Guidelines, § 15126.6, subd. (a); *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 556.) Instead, the selection and consideration of project alternatives is governed by a “rule of reason.” (CEQA Guidelines, § 15126.6, subd. (a).) “[T]he discussion of alternatives need not be exhaustive,” and need not analyze every alternative recommended by third parties. (*Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 548; *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 354-355.) Given the EIR/EIS’s consideration and rejection of a range of alternative intake systems and sites, there is no reason to further evaluate the possibility of unspecified intake system sites outside the coastal zone.
- MCWD argues that the Project’s intake wells could function “equally well” outside the coastal zone, and that the wells would likely need to be moved inland to account for sea-level rise, and therefore the Project is not “coastal dependent.” (MCWD Letter, p. 75.)
 - MCWD does not provide any evidence to support its claims that the slant wells could feasibly function in a location outside of the coastal zone, nor does MCWD provide any proposal for inland locations where the slant wells could feasibly be sited. What’s more, the CPUC did not identify any such locations in its six-year CEQA review of Cal-Am’s Project, in which MCWD was a major participant. MCWD’s argument that alternative well locations should be reviewed now by the Commission is nothing but a red herring.

J. Coastal Act Section 30260 Override for Coastal-Dependent Facility

1. General Legal Framework

- MCWD contends that the Commission retains limited appellate jurisdiction and cannot rely on Coastal Act section 30260 to approve the Project because the only basis for this

type of appeal is whether a project is consistent with the LCP. (MCWD Letter, pp. 61-63.)

- MCWD’s jurisdictional argument has been properly rejected by staff (Staff Report, pp. 147-148), and the California Court of Appeal in MCWD’s challenge to the Commission’s grant of a CDP allowing Cal-Am to locate its test slant well on the CEMEX site—the very same location where the Project’s wells will be located. (See *MCWD v. Cal. Coastal Com.* (2016) 2016 WL 6267909.) Marina’s LCP must be applied consistent with the Coastal Act and state policy. (See *McAllister v. Cal. Coastal Com.* (2009) 169 Cal.App.4th 921, 931; *MCWD*, 2016 WL 6267909, at *13.)
- Furthermore, as the Staff Report explained, Marina’s LCP incorporates Coastal Act section 30260 to determine permissible uses at the proposed Project site. (See Staff Report, pp. 147-148.) The LCP permits coastal-dependent uses in already disturbed areas and “states that this designation is consistent with section 30260.” (*MCWD*, 2016 WL 6267909, at *13; see Land Use Plan, p. 38; see also Marina Municipal Code, § 17.41.160 [includes coastal-dependent industrial uses within the coastal conservation and development district].)
- Therefore, the Commission may properly conduct an analysis and approve Cal-Am’s Project under Coastal Act section 30260.

2. Qualification as a Coastal-Dependent Industrial Facility

- MCWD argues that section 30260 does not apply because the Project is not “coastal-dependent.” (MCWD Letter, p. 63.)
 - As the Staff Report correctly concludes, the Project is a coastal-dependent industrial facility. (See Staff Report, p. 149.) The Project involves the processing of raw materials (water) and must be located adjacent to Monterey Bay to extract *primarily seawater* from beneath the seafloor. (*Ibid.* [rejecting claims that the Project will be primarily drawing brackish water].) In addition, the Project’s Source Water Pipeline is necessary to convey that water to the desalination facility. (*Ibid.*) Further, the Project will use the M1W outfall to convey the facility’s brine discharges into coastal waters. (*Ibid.*) If the Project were moved away from the coast, the entire basis for and underlying analysis of the Project would change. (See Final EIR/EIS, p. 4.4-56.)¹⁷
- MCWD further argues that Cal-Am cannot rely on its use of the M1W outfall to show that the Project is coastal-dependent because, according to MCWD, Cal-Am asserts that the outfall is not relevant to its CDP applications. (MCWD Letter, p. 63.) MCWD

¹⁷ This is also consistent with the Court of Appeal reasoning in *MCWD I*, which concluded that the “test slant well meets the [City’s] LCP’s definition of a coastal-dependent industrial facility.” (2016 WL 6267909, at *13.)

conflates the various outfall-related aspects of the Project and misconstrues Cal-Am's position.

- As described below in Section K of this Response, Cal-Am's proposed spray-lining work to maintain the integrity of the existing outfall pipeline is not development under the Coastal Act, or alternatively, is exempt from CDP requirements. Although the outfall lining work is not part of the CDP applications pending before the Commission, Cal-Am has nonetheless proposed Special Condition 4, which requires Cal-Am to obtain all necessary approvals for the outfall lining work and to implement the spray lining method to the pipeline to avoid impacts to coastal resources. (See Applicant's Staff Report, Section IV.F.)
- The aspects of the outfall maintenance that will occur in the Coastal Zone, such as the replacement of the outfall clamps along the beach, are included in Cal-Am's local CDP application and, thus, are before the Commission as part of Appeal No. 9-19-0918. (See Applicant's Staff Report, Section IV.F.)
- The fact that Cal-Am did not include the outfall lining work as part of its CDP application does not mean the outfall pipeline and Cal-Am's use of the pipeline to convey brine discharge is not coastal-dependent.

3. Alternative Locations

- MCWD argues that the PWM Expansion is a feasible alternative and that there are also alternative locations for the Project's slant well network outside of the Coastal Zone. (MCWD Letter, pp. 63-64.)
 - As explained in detail in the Applicant's Staff Report, Sections IV.O and IV.P, and above in Section I, the PWM Expansion is not a feasible alternative, and the proposed location for the slant wells is the environmentally superior alternative location.

4. Public Welfare

- MCWD asserts that Cal-Am simply argues that not approving project would adversely affect public welfare because it "would have no other options for complying with the CDO and could not supply sufficient water to its water district." (MCWD Letter, p. 64.) This is a complete oversimplification of Cal-Am's position. Additionally, MCWD contends that the Project will actively harm the public "for numerous reasons." (*Ibid.*) Not only does MCWD fail to specify what these "numerous reasons" are, but MCWD is also incorrect.
 - As explained in detail in the Applicant's Staff Report, Section IV.P, and Attachment B, Section K, the Project would have numerous benefits to the public and denial of the Project would result in detrimental effects to the public welfare.

5. Mitigation to the Maximum Extent Feasible

- MCWD asserts generally that Cal-Am has not shown “that impacts have been mitigated to the maximum extent feasible,” and that Cal-Am has not provided certain information “to evaluate critical project components.”¹⁸ (MCWD Letter, p. 64.)
 - As explained in detail in the Applicant’s Staff Report, Section IV.P, and Attachment B, Section K, the Project’s potential impacts will be mitigated to the maximum extent feasible. For example, implementation of the CPUC’s mitigation measures, Cal-Am’s HMMP, Cal-Am’s Adaptive Management Program for Vernal Ponds, and proposed Special Conditions 5, 7 will assist in ensuring that impacts are mitigated to the maximum extent feasible.

Further, contrary to MCWD’s assertions (MCWD Letter, p. 64), Cal-Am is not refusing to provide critical information regarding impacts resulting from the installation of the outfall liner. As explained in Attachment B, Section [Outfall], the outfall work for M1W is outside the scope of Cal-Am’s CDP application. Nonetheless, Cal-Am has proposed Special Condition 4 to require installation of the outfall liner using the spray-lining method to avoid potential impacts to coastal resources. (See Applicant’s Staff Report, Section IV.F.)

K. Proposed Outfall Liner

- MCWD incorrectly contends that the failure to consider the proposed outfall lining work in the current CDP application amounts to improper “piecemealing” of environmental review for Project elements within the Coastal Zone. (MCWD Letter, pp. 11, 64-66, 71-72.)
 - Here, the CPUC, as lead agency, already prepared, circulated, and adopted the Final EIR/EIS for the entire Project, which includes a detailed discussion of the impacts related to the most environmentally impactful methodology proposed for the outfall pipeline lining work. (See Final EIR/EIS, pp. 4.13-33 to 4.13-36.) Thus, no element of the Project is evading environmental review.
 - The authorities MCWD cites to support its claim that a second CDP for the outfall lining work would result in improper “piecemealing” are inapposite. MCWD’s cases involve CEQA lead agencies failing to analyze the environmental impacts of development so related to the project under consideration that it must be considered a “single project” or the “whole of an action” under CEQA. (CEQA Guidelines § 15378, subd. (a); see e.g. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 732; *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonoma* (2007) 155 Cal.App.4th 1214,

¹⁸ MCWD no longer argues that impacts be “fully mitigated.” Instead, impacts need only be mitigated to the “maximum extent feasible.” (See, e.g., 14 Cal. Code Regs., § 13053.5, subd. (a); see also *id.*, §§ 13328.1, 13356, subd. (b)(2), 13540, 13666.4.)

EXHIBIT E



Monterey One Water

Providing Cooperative Water Solutions

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Copy by e-mail to: Tom.Luster@coastal.ca.gov

August 20, 2020

Mr. Tom Luster
California Coastal Commission
Energy and Ocean Resources Unit
455 Market Street, Suite 228
San Francisco, CA 94105

Re: Response to Requests for Clarification regarding Latham & Watkins, LLP letter dated August 13 regarding Monterey Peninsula Water Supply Project CDP Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034

Dear Mr. Luster:

With this letter, Monterey One Water ("M1W") hereby responds to your inquiry dated August 13, 2020 regarding the above-referenced letter from Latham and Watkins LLC.

Water Supply and Demand and Exhibit 2 (Hazen & Sawyer Letter)

Declining Wastewater Flows

The Latham and Watkins letter and Exhibit 2 appears to contain inaccurate analyses and conclusions regarding sources of supply and yields for the PWM Project and the possible PWM Expansion, as proposed by others. In Exhibit 2, Figure 3, Hazen & Sawyer showed a decline in influent wastewater flow volumes from 2000 to 2013, and using that historic and incomplete influent data, they project 2014 through 2020 volumes using a trend line (linear extrapolation). The incorrect resultant wastewater flows in 2020 of 17,016 acre-feet per year (AFY) permeates into analysis throughout the remainder of the report. Figures on pages 12, 14, and 20 and associated text in Exhibit 2 are based on multiple inaccuracies (see also Surface Water Limitation which further falsify these charts). Actual flows since 2013 are shown below.

Regional Treatment Plant Influent Wastewater Flows	
Year	Volume (in AFY)
2014	21,695
2015	19,739
2016	20,474
2017	19,860
2018	18,810
2019	18,875
Six-Year Average	19,909

The inaccurate trend line result is then incorrectly reduced further using an erroneous correlative relationship. Hazen and Sawyer apply a wastewater volume reduction factor of 15.3% based on a trend of CalAm service area water demands. Wastewater flows to the Regional Treatment Plant (RTP) do not correlate to CalAm water demands for the following reasons:

- 1) the Monterey Peninsula, including the Marina Coast Water District (MCWD) water supply service area, comprises only approximately 46% of the influent flow to the M1W RTP;
- 2) CalAm's service area contains Pebble Beach, Carmel and vicinity, Carmel Valley none of which are included in M1W's service area; and
- 3) a substantial portion of the decline in Monterey Peninsula/CalAm demands are due to reduced outdoor irrigation which have no effect on wastewater flows.

The combined errors underestimate wastewater flows at the RTP by approximately 3,000 AFY.

Source Waters for PWM Expansion

Notwithstanding the above, the future amount of additional Agricultural Wash Water, Blanco Drain, and Reclamation Ditch available to the Pure Water Monterey Project depends on the satisfaction of conditions precedent contained in Section 16.15 of the *Amended and Restated Water Recycling Agreement* ["Water Recycling Agreement"] that would enable M1W to use those waters for agricultural irrigation in Salinas Valley.

The source water discussion for the possible PWM Expansion is complex due to the number of variables in the system. However, the document "Approved Pure Water Monterey Project and Proposed Modifications to Expand the PWM Project – Source Water Operational Plan" in Appendix M - Supplemental Environmental Impact Report (SEIR) provides a detailed analysis of source water to meet the possible PWM Expansion yield in all scenarios using the following:

- secondary effluent otherwise discharged to the ocean,
- one half of wastewater from outside the 2001 service area,
- waters committed in the Water Recycling Agreement (section 4.01 1(d)), and
- operating reserve (in a drought year if conditions precedent in Water Recycling Agreement Section 16.15 are not met).

There is disagreement from the M1W Board regarding adequacy of source waters for the PWM Expansion.

PWM Project (Ian Crooks Letter)

Delays

For the last six months, the PWM Project has been producing purified recycled water and recharging the Seaside Basin. As originally intended, the PWM Project is delivering the first new drinking water supply for North Monterey County in over a decade.

The Latham and Watkins letter to the Coastal Commission criticizes M1W for having scheduling delays on the PWM Project, as if the Cal-Am Monterey Peninsula Water Supply Project has not experienced any delays. Implementing a \$100+ million public works infrastructure projects in under seven years from conception to operation is a monumental success that should be celebrated by all local, regional, and State-level stakeholders, including Cal-Am.

Injection Well Operational Problems and Solutions to Meet Yield Requirements

The PWM Project planning, CEQA certification, permitting, and the Water Purchase Agreement (WPA) consisted of four deep wells and four shallow wells. Currently, there are two deep wells and two shallow wells, which was intended as a potential cost-saving measure for rate payers. Unfortunately, Mother Nature and the uncertainties of the local hydrogeology did not cooperate, such that the shallow wells have underperformed. It is anticipated the two existing deep wells, currently going through final commissioning, will eventually approach and possibly exceed their planned injection capacity. To ensure adequate long-term recharge capacity, a third deep well is being designed and is scheduled for operation by the end of 2021.

The PWM Project will complete delivery of its first 1,000 acre-feet to the Seaside Basin this week to meet the WPA operational reserve. The PWM Project water deliveries will then be used by CalAm to reduce Carmel River diversions. The original objective of an average of 3,500 AFY of groundwater injections for water supply is achievable with current plans to complete the third deep injection well. Upon completion of the next injection well, the Project is expected to achieve the 3,700 AFY injection yield pursuant to the WPA. An implementation schedule detailing the timelines for existing well improvements and the third injection well is attached as **Exhibit A**.

Potential PWM Expansion Status

The SEIR for a possible PWM Expansion was not certified by the M1W Board on April 27, 2020. Staff was directed to suspend work on any aspect of the PWM Expansion.

Agricultural Source Water Issues

The comment regarding the treatability of the Salinas industrial wastewater (SIWW) or "Agricultural Wash Water" in Latham and Watkins letter (page 4, last bullet) is incorrect. The SIWW has been successfully treated at the RTP and advanced water purification demonstration facility since 2013 and recently through the Advanced Water Purification Facility. M1W has met all regulatory water quality standards while treating SIWW.

The SIWW is a safe source water for the PWM Project. The Division of Drinking Water approved the use of SIWW as additional RTP influent after extensive review of its water quality and PWM pilot testing results, and with independent expert input from a National Water Research Institute Independent Advisory Panel. The SIWW flows presently are not needed to meet the PWM Project production goals or agricultural irrigation recycled water demands. Source water diversion volumes are not included in the monthly and quarterly reports, but they will be reported in the annual reports.

There is nothing controversial about the safety of the SIWW; its treatment challenges are conventional and manageable. Typical constituents are total organic carbon, biological oxygen demand and phosphate. Should satisfaction of conditions precedent contained in Section 16.15 of the Water Recycling Agreement not occur, Monterey County Water Resources Agency shall retain the right to utilize 100% of the SIWW.

Please contact me if you have any further questions or require additional information.

Sincerely,



Paul A. Sciuto
General Manager

Enclosure: Exhibit A. Pure Water Monterey Executive Schedule

EXHIBIT F

Seaside Groundwater Basin Watermaster
P.O. Box 51502, Pacific Grove, CA 93950
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(831) 641-0113

Paul Bruno, Coastal Subarea Landowners, Chairman

Dan Albert, City of Monterey, Vice Chairman

John Gaglioti, City of Del Rey Oaks, Treasurer

*Mary Adams, Monterey County/Monterey County
Water Resources Agency*

Mary Anne Carbone, City of Sand City

Christopher Cook, California American Water

Wesley Leith, Laguna Seca Subarea Landowners

Ian Oglesby, City of Seaside

*George Riley, Monterey Peninsula Water
Management District*

August 12, 2020

Mr. John Ainsworth, Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Re: Monterey Peninsula Water Supply Project – Support

Dear Mr. Ainsworth:

The Seaside Groundwater Basin Watermaster is tasked by the Court to administer the Seaside Basin. Our board is comprised of elected officials and others who each have a role in the protection and management of the basin.

Today I once again write to urge your approval of Coastal Development Permit (CDP) for California American Water Company's (CAW) Monterey Peninsula Water Supply Project (MPWSP). In October of 2019, our board approved a resolution in support of the MPWSP. That resolution was presented to the Coastal Commission at its prior hearing on the project.

As the Coastal Commission is well aware, the MPWSP is necessary to meet the long-term water demands of the Monterey Peninsula. No other project has been identified to reliably meet the communities' water needs sufficiently to get the community out from under the State Water Board's Cease and Desist Order. The MPWSP also will provide much needed protections to one of the Peninsula's other critical water supply sources, the Seaside Groundwater Basin.

- Without the quantities of supplemental supplies from the MPWSP, CAW and other Seaside Basin pumpers may not be able to meet the pumping reductions called for in the Seaside Basin Decision.
- The MPWSP supply is necessary to meet the replenishment obligations required in the Seaside Basin Decision, and to avoid the undesirable consequences of overdraft, and seawater intrusion.
- Without the quantity of supplemental supplies provided by the MPWSP, the Seaside Basin Watermaster cannot achieve the protective water levels (PWL) for the Basin that have been identified as necessary to avoid seawater intrusion and irreversible loss of Basin storage.
- If Seaside Basin storage is lost or reduced as a result of seawater intrusion, other existing water supplies - such as native groundwater, Aquifer Storage and Recovery, and Pure Water Monterey – are in serious jeopardy, as seawater intruded aquifers cannot be used for groundwater storage.
- The MPWSP is necessary to provide the Seaside Basin with the replenishment needed for reliable protection against seawater intrusion.

It is imperative that the Coastal Commission and other stakeholders understand what is truly at stake for the Seaside Basin and the water supplies that are dependent on the health and security of the Basin. The Seaside Basin is perhaps the most critical water supply resource for the Monterey Peninsula. The Basin provides more than 3,000-acre feet of native groundwater annually for

municipal uses in CAW's Monterey and Laguna Seca Districts and to the Cities of Seaside and Sand City, and also is used for other beneficial uses in the Basin. The Basin also provides critical groundwater storage for CAW's Aquifer Storage and Recovery (ASR) diversions from the Carmel River, and provides storage and treatment of recycled water for Monterey One Water's Pure Water Monterey (PWM) Project. The loss of Seaside Basin storage as a result of overdraft and seawater intrusion would have a catastrophic impact on these crucial existing water supplies, not only for CAW's customers on the Monterey Peninsula, but for the other municipal and irrigation users in Monterey County.

The Seaside Basin Decision, as amended in February 2007, allocates the yield of the Seaside Basin to municipal and overlying groundwater users according a formula and schedule set forth in the Decision. The Decision requires gradual reduction in total Basin production in order to reduce Basin pumping to Natural Safe Yield, which was determined to be approximately 2,900 acre-feet in 2007. Municipal pumpers that exceed their Natural Safe Yield allocations are required to replenish the Basin for such overproduction, even if that overproduction is authorized under the Decision. The Decision also obligates Watermaster to study and manage conditions in the Basin and, to the extent Watermaster finds that pumping may result in Material Injury to the Basin, and to request relief from the Court to avoid or mitigate Material Injury to the Basin and its users. The Decision defines Material Injury to include impacts such as seawater intrusion, water quality degradation and subsidence.

Under the Decision, CAW currently is obligated to replenish approximately 700-acre feet per year (afy) over a 25-year period in order to offset its overproduction. This replenishment will be accomplished by "in lieu recharge" of the Basin, i.e., CAW reducing its authorized pumping by 700 afy and allowing that unpumped groundwater to remain in groundwater storage. For planning purposes, Watermaster has assumed that the MPWSP will deliver approximately 700 afy to satisfy CAW's replenishment obligation, in-lieu of exercising its pumping rights. The Commission's evaluation of water supply and demand cannot merely assume CAW's yield allocation under the Decision (approximately 1,800 afy, reduced to 1,500 afy in 2021), but must also consider an additional 700 afy necessary to satisfy replenishment obligations under the Decision. Water supply and demand analyses that do not consider this replenishment obligation as a water demand (or as a reduction in the available Seaside Basin native groundwater supply) are ignoring potential Material Injury to the Seaside Basin.

In addition to administering the Natural Safe Yield of the Seaside Basin Decision, Watermaster has been carefully studying and evaluating seawater intrusion risks and potential management actions to avoid the disastrous consequences of seawater intrusion into the Seaside Basin. As described in the attached memorandum from Watermaster's Technical Program Manager, Robert Jaques, increasing groundwater elevations in the Seaside Basin aquifers across the coastal front has been identified by Watermaster's technical experts as a prudent and necessary action to prevent seawater intrusion into the Basin's aquifers. Based on our analysis of water elevations in several key coastal wells, Watermaster has found that higher groundwater elevations are needed in both the Paso Robles (shallow) and Santa Margarita (deep) aquifers to reduce the risk of seawater intrusion. To achieve these protective water levels (PWL), Watermaster has found that approximately 1,000 afy of additional replenishment is required over a 25-year period. The MPWSP is the only possible supplemental water project before us that is capable of supplying the additional water needed to allow Watermaster to sustain PWL in the Basin.

Sincerely,



Paul B. Bruno, Chairman

**Seaside Basin Watermaster
P.O. Box 51502
Pacific Grove, CA 93950
(831) 641-0113**

MEMORANDUM

TO: Chairman of the Board of Directors of the Seaside Groundwater Basin Watermaster

FROM: Robert Jaques, Technical Program Manager

DATE: August 11 , 2020

SUBJECT: Recharge Water Is Needed to Protect the Seaside Groundwater Basin
Against Seawater Intrusion

To our Technical Advisory Committee, I recently presented an analysis of groundwater modeling work and other reports pertaining to proposed projects that would supply water to help stabilize groundwater levels in the Basin. The Committee unanimously approved the analysis and recommended that it be presented to the Board of Directors.

Background & Discussion

The Seaside Groundwater Basin Adjudication Decision, which established the Watermaster in 2006, had as its primary purpose reducing pumping from the Basin in order to stabilize groundwater levels to prevent seawater intrusion. The Seaside Basin is a critical source of water supply for the Monterey Peninsula. The management actions in the Decision reflect the fact that the Basin had been over-pumped for many years prior to the issuance of the Decision, but does not contain express requirements for water levels to be raised. It only required that pumping be reduced to keep groundwater levels from continuing to fall. We now know that groundwater levels in the Basin have continued to fall in some areas despite implementation of the Decision-required pumping reductions, and that even if they stabilized at current levels they would be well below sea level in some parts of the Basin.

Protective Water Levels (PWLs) were developed for four wells located near the coast in the Coastal Subarea of the Basin. If the groundwater level is at or above the PWL at a given location, it means that seawater cannot intrude into that area because the groundwater level is sufficiently above sea level to prevent that from happening. Currently, groundwater levels at all of the wells in the deep (Santa Margarita) aquifer are below their respective PWLs, and only one of the groundwater levels is above its PWL in the shallow (Paso Robles) aquifer. Our hydrogeologic consultants have told us with

certainty that persistence of groundwater levels below PWLs will lead to seawater intrusion into the Basin. Loss of groundwater storage to seawater intrusion will be very difficult, if not impossible, to reverse. While it is not possible at this time to accurately predict when that could occur, groundwater levels need to rise above PWLs to ensure protection of the aquifers.

The only way to achieve PWLs is to inject more water into the Basin than is taken out, so that the Basin is permanently recharged and not just used as a temporary storage vessel (which is the case with the existing Pure Water Monterey Project and the proposed Pure Water Monterey Expansion Project).

Principle Conclusions from the Analysis

If the Desalination Plant is Not Constructed and There is No Expansion of the Pure Water Monterey Project (Under this scenario the only project constructed is the original 3,500 AFY PWM Project)

- There is negligible net change in groundwater levels because on average the amount of water that is replenished is quickly extracted and not left in the Basin.
- PWLs will not be achieved.
- The Basin will not be protected against seawater intrusion.

If the Desalination Plant is Not Constructed and the Pure Water Monterey Expansion Project is Constructed (Under this scenario both the original PWM Project and the PWM Expansion Project would be in operation)

- The groundwater modeling for the original PWM Project used the same Cal Am water demand figures that were used in the EIR/EIS for the MPWSP. The groundwater modeling performed for the PWM Expansion Project used water demand figures developed by MPWMD that are several thousand AFY lower than the demand figures that were used when the modeling was done for the original PWM Project.
- Even using the lower water demand figures mentioned above, PWLs will not be achieved and the Basin will not be protected against seawater intrusion with the Expanded Pure Water Monterey Project because additional replenishment water will not be available for the Seaside Basin.
- If the higher and more conservative original water demand values were used in the PWM Expansion Project modeling, that modeling would show an even greater threat of seawater intrusion because additional replenishment water will not be available for the Seaside Basin and pumping from the Basin would need to be greater to meet the higher demands.

Additional Replenishment Water Will be Needed to Achieve Protective Elevations

- Previous modeling indicates injecting on the order of 1,000 AFY of additional water into the Seaside Basin for 25 years, along with the existing Cal Am replenishment obligations and the original PWM Project and either the desalination plant or the PWM Expansion Project, may be necessary to achieve protective elevations at all Basin locations within 25 years.

- Groundwater modeling that incorporates the actual projects that are to be constructed, i.e. either the desalination plant or the PWM Expansion Project, would need to be performed to refine the amount of additional injection water that would be needed.
- In its initial years of operation the desalination plant will have unused capacity that could potentially provide some of this replenishment water.
- If the desalination plant is constructed, a smaller PWM Expansion Project could likely provide the additional water needed to achieve protective elevations.

EXHIBIT G



**MONTGOMERY
& ASSOCIATES**

Water Resource Consultants

November 19, 2020

Seaside Groundwater Basin 2020 Seawater Intrusion Analysis Report

Prepared for:

Seaside Groundwater Basin Watermaster
Monterey County, California

Prepared by:

Montgomery & Associates
1970 Broadway, Suite 225
Oakland, CA 94602



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ACRONYMS & ABBREVIATIONS

amsl.....	above mean sea level
ASR.....	aquifer storage and recovery
bgs.....	below ground surface
Ca.....	calcium
CAWC.....	California American Water Company
Cl.....	chloride
CO ₃	carbonate
FO.....	Fort Ord
HCO ₃	bicarbonate
K.....	potassium
MCWRA.....	Monterey County Water Resources Agency
meq/L.....	milliequivalent per liter
Mg.....	magnesium
mg/L.....	milligrams per liter
MPWMD.....	Monterey Peninsula Water Management District
MSC.....	Monterey Sand Company
Na.....	sodium
PCA.....	Pacific Cement Aggregates
PVWMA.....	Pajaro Valley Water Management Agency
PWM.....	Pure Water Monterey
SBMMP.....	Seaside Groundwater Basin Monitoring and Management Program
SO ₄	sulfate
TAC.....	Technical Advisory Committee
WY.....	Water Year



EXECUTIVE SUMMARY

This report fulfills part of the annual reporting requirements contained in the Seaside Groundwater Basin Adjudication (California American Water v. City of Seaside, Monterey County Superior Court, Case Number M66343). The annual report addresses the potential for, and extent of, seawater intrusion in the Seaside Groundwater Basin.

Seawater intrusion may occur under basic hydrogeologic conditions as a wedge beneath fresh groundwater, or in more complex hydrogeology with various intrusion interfaces among the different aquifers. Continued pumping in excess of recharge and fresh water inflows, coastal groundwater levels well below sea level, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion could occur in the Seaside Groundwater Basin.

Seawater intrusion is typically identified through regular chemical analyses of groundwater which can identify geochemical changes in response to seawater intrusion. No single analysis definitively identifies seawater intrusion, however by looking at various analyses we can ascertain when fresh groundwater mixes with seawater. At low chloride concentrations, it is often difficult to identify incipient seawater intrusion. This is due to the natural variation in fresh water chemistry at chloride concentrations below 1,000 milligrams per liter (mg/L). Mixing trends between groundwater and seawater are more easily defined when chloride concentrations exceed 1,000 mg/L. Common geochemical indicators of seawater intrusion are cation and anion ratios, chloride trends, sodium/chloride ratios, and electric induction logging.

Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. In Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing increasing chloride concentrations. One of these is north of and outside of the Seaside Basin (monitoring well FO-10 Shallow), and the other is just inside the northern boundary of the Seaside Basin in the Northern Coastal Subarea (monitoring well FO-9 Shallow). However, none of the Watermaster's Sentinel Wells, located closer to the coastline than monitoring wells FO-9 and FO-10, detected seawater intrusion in the shallow aquifer in their induction logs. The sampling frequency for monitoring wells FO-9 Shallow and FO-10 Shallow should be increased to quarterly to establish if their chloride concentrations are true trends, or anomalous. Since the Sentinel Wells have not detected an increase in salinity, if seawater is starting to impact the FO-9 Shallow and FO10-Shallow monitoring wells, it may be coming from the north out of the Monterey Subbasin where there is already seawater intrusion, rather than directly inland from the coastline of the Seaside Basin. Although seawater intrusion is not occurring in any other location in the Seaside Basin being monitored, there are ongoing



detrimental groundwater conditions that pose a potential threat of seawater intrusion as described below.

Both the Paso Robles and Santa Margarita aquifers in the Seaside Groundwater Basin are susceptible to seawater intrusion. The Paso Robles aquifer is in direct hydrogeologic connection with Monterey Bay, and seawater will eventually flow into it if inland groundwater levels continue to be below sea level. The Santa Margarita aquifer may not be in direct connection with Monterey Bay. If that is the case, then seawater intrusion will take longer to appear because the pathway for seawater into that aquifer will be longer as seawater would need to move through the clay rich deposits adjacent to that aquifer before entering the aquifer itself and thereafter make its way into Santa Margarita production wells. It is not if, but when, seawater intrusion into these aquifers will occur if protective water elevations are not achieved.

- Deep groundwater in the Northern Coastal subarea remains below sea level. The Water Year 2020 2nd quarter (winter/spring) deep aquifer coastal groundwater levels are more than 20 feet below sea level and the 4th quarter (summer/fall) levels are more than 30 feet below sea level. The pumping depression in the Northern Coastal subarea shrunk slightly because CAWC pumped almost 800 acre-feet less than last year in the subarea.
- Groundwater levels remain below protective elevations in all deep target monitoring wells (MSC Deep, PCA-W Deep, and sentinel well SBWM-3). Currently, MSC Shallow and PCA-W Shallow are two of three shallow wells with groundwater levels below their respective protective elevations.

Data that indicate that seawater intrusion is not occurring are described in the bulleted items below:

- Most groundwater samples for Water Year 2020 from depth-discreet monitoring wells generally plot in a single cluster on Piper diagrams, with no water chemistry changes towards seawater. Increased chloride in recent samples at FO-9 Shallow and FO-10 Shallow has shifted how these wells plot on Piper diagrams towards a chlorinated water type, however they still generally plot between sodium-chloride and sodium-bicarbonate type waters.
- In some production wells, groundwater quality plots differently on Piper diagrams than the monitoring wells. This may be a result of mixed water quality from both shallow and deep zones in which these wells are perforated. None of the production wells' groundwater qualities are indicative of seawater intrusion.
- None of the Stiff diagrams for monitoring and production wells show the characteristic chloride spike that typically indicates seawater intrusion in Stiff diagrams. The Stiff



diagrams for monitoring wells FO-9 Shallow and FO-10 Shallow show a slightly different shape than other shallow wells because of their increased chloride.

- Chloride concentration trends were stable for most monitoring wells, except FO-9 Shallow and FO-10 Shallow. Monitoring well FO-09 Shallow has experienced increased chloride concentrations in all three samples taken during Water Year 2020, in addition to increases observed in the three samples taken last water year. The increase in concentrations between Water Years 2019 and 2020 is around 13 mg/L, which is greater than fluctuations observed historically over its period of record. Monitoring well FO-10 Shallow experienced a 48 mg/L increase in chloride concentrations in the sample taken this year. The elevated concentrations in themselves do not indicate seawater intrusion, however, these wells should both be monitored quarterly over the next year to determine if the increasing chloride concentrations are temporary or not.
- Sodium/chloride molar ratios in most monitoring wells remained constant or increased over the past year. Monitoring well FO-09 Shallow experienced an increase in chloride as mentioned above, and its sodium/chloride ratio of 0.82 in Water Year 2020 is just above its historical minimum of 0.81. Monitoring well FO-10 Shallow also experienced an increase in chloride over the last year and currently has a sodium/chloride ratio of 0.79. Sodium/chloride ratios at both of these wells are below the 0.86 ratio that may identify seawater intrusion as the source of chloride as opposed to a domestic wastewater source
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing towards the coast. However, northern monitoring wells FO-9 Shallow and FO-10 Shallow have recently increased chloride concentrations, but at concentrations still less than 100 mg/L. The deep aquifer maps show that the highest chloride concentrations are limited to coastal monitoring wells PCA-West Deep and MSC Deep, but these are not indicative of seawater intrusion since their concentrations are less than 155 mg/L and they do not have increasing trends.
- Induction logging data at the coastal Sentinel Wells do not show historical or recent changes over time that are indicative of seawater intrusion.

Due to its distance from the coast, seawater intrusion is not an issue of concern in the Laguna Seca subarea. However, groundwater levels in the eastern Laguna Seca subarea have historically declined at rates of 0.6 feet per year in the shallow aquifers, and up to four feet per year in the deep aquifers. These declines have occurred since 2001, despite triennial reductions in allowable pumping. The cause of the declines is due in part to the Natural Safe Yield of the subarea being too high and in part due to the influence of wells to the east of the Seaside Basin. Although there was some stabilization in groundwater levels between Water Years 2014 and 2016, groundwater levels are continuing to decline. The rate of decline now, however, is less than 0.6 feet per year.



Native groundwater production in the Seaside Groundwater Basin for Water Year 2020 was 3,323.1 acre-feet, which is 52.9 acre-feet more than Water Year 2019. The amount of native groundwater pumped in Water Year 2020 is 36.9 acre-feet less than the Decision-ordered Operating Yield of 3,360 acre-feet per year that is required between October 1, 2017 and September 30, 2020. The Decision-ordered Operating Yield for Water Year 2021 will be 3,000 acre-feet.

Based on recent corresponding increases in chloride concentrations at monitoring wells FO-9 Shallow and FO-10 Shallow, both in relatively close proximity to known intrusion in the Salinas Valley, the following is recommended:

1. Monitoring well FO-10 Shallow be immediately resampled to confirm the 48 mg/L chloride increase. A sample was collected on November 10, 2020 and results are expected within a month.
2. Monitoring wells FO-9 Shallow and FO-10 Shallow's sampling frequency be increased to quarterly and that their groundwater quality results be reviewed after each sampling event to identify if the recent increases are part of natural fluctuations or an ongoing increasing trend. Monitoring well FO-9 Shallow is currently monitored on a semi-annual basis, increased from annual sampling, because an increasing chloride trend had previously been observed. Monitoring well FO-10 Shallow is currently monitored on an annual basis.

With the exception of monitoring wells FO-09 Shallow and FO-10 Shallow, data analyzed for this report did not deviate significantly from historical data. Therefore, besides increased sampling frequency recommended for FO-09 Shallow and FO-10 Shallow, there are no additional recommendations on sampling frequencies.

As projects that recharge and recover water in the Basin are implemented, groundwater levels and thus groundwater flow directions will change, and possibly groundwater quality too. It is therefore important that data from new monitoring wells are reported to the Watermaster and taken into consideration in future SIARs. Watermaster staff worked in 2020 to identify monitoring wells associated with Pure Water Monterey that would be beneficial to the SIAR. Data from these wells have not yet been incorporated into the SIAR. Data from these wells will start to be incorporated into the SIAR in Water Year 2021.



1 BACKGROUND AND INTRODUCTION

Historical and persistent low groundwater elevations caused by pumping in the Seaside Groundwater Basin have led to concerns that seawater intrusion may threaten the Basin's groundwater resources. This report addresses the potential for, and extent of, seawater intrusion in the Seaside Groundwater Basin. The report first reviews seawater intrusion mechanisms, analyzes historical water quality data for indications of seawater intrusion in the Seaside Groundwater Basin, and finally reaches conclusions on the extent of seawater intrusion and proposes recommendations for continued monitoring.

This report fulfills part of the annual reporting requirements contained in the Seaside Groundwater Basin Adjudication (California American Water v. City of Seaside, Monterey County Superior Court, Case Number M66343). The analyses in this report were developed by HydroMetrics Water Resources Inc. of Oakland, CA, in cooperation with members of the Watermaster Technical Advisory Committee (TAC). Staff from the Monterey County Water Resources Agency (MWCRA) and Monterey Peninsula Water Management District (MPWMD) provided invaluable assistance, data, and review during the preparation of this report.

This report is the eleventh in a series of Seawater Intrusion Analysis Reports (SIAR) which are produced annually by the Watermaster. It builds on the work performed in the preceding SIARs.



1.1 Overview of Seawater Intrusion

Seawater intrusion is a threat to many coastal groundwater basins along the California Coast. It has been observed and documented in a number of groundwater basins in both southern and central California.

In general, groundwater in coastal basins flows from recharge areas in local highlands towards discharge areas along the coast. In most undeveloped coastal groundwater basins there is a net outflow of fresh water into the ocean. Seawater intrusion occurs when the outflow of freshwater ceases and seawater flows into the groundwater basin from the ocean.

In the simplest condition, seawater intrudes as a wedge beneath the fresh groundwater (Figure 1). This wedge shape is a result of seawater being denser than freshwater.

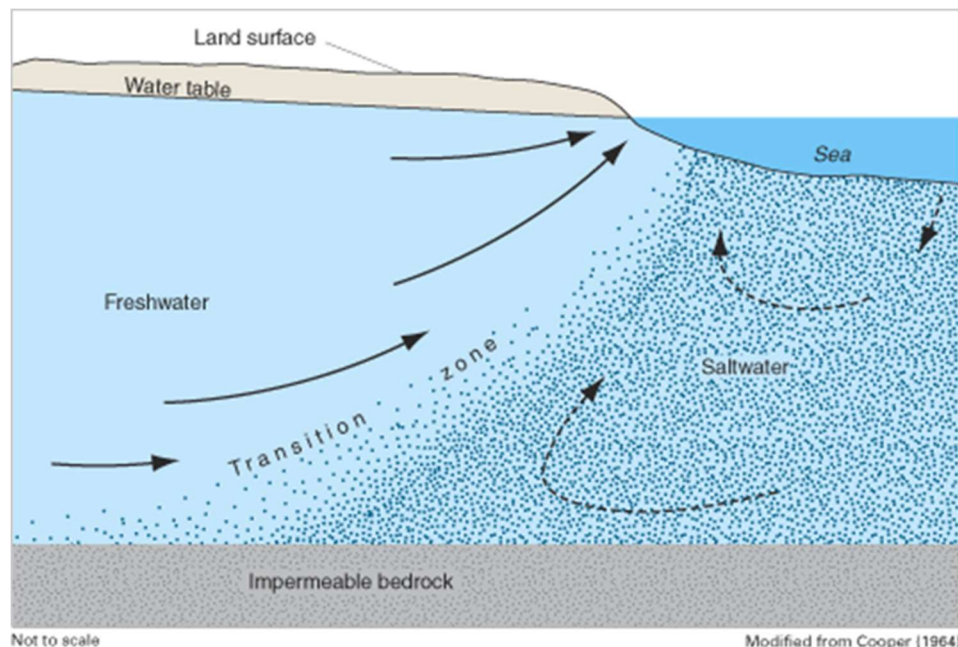


Figure 1. Seawater Wedge in a Simple Coastal Aquifer (from Barlow, 2003)

In more complex, layered groundwater systems, the location of the seawater/freshwater interface may vary among the different aquifers. Such a situation is illustrated on Figure 2. Figure 2 shows a series of aquifers in blue, which transmit water easily. The aquifers are separated by a series of tan aquitards, which transmit water relatively slowly. Each aquifer has a unique rate of outflow to the ocean, and therefore a unique location of the seawater interface. In these more complex situations, the locations of the seawater/freshwater interfaces are a complex function of the horizontal groundwater gradient in each aquifer, the aquifer hydraulic conductivities, and the vertical conductivity of the inter-layer aquitards.

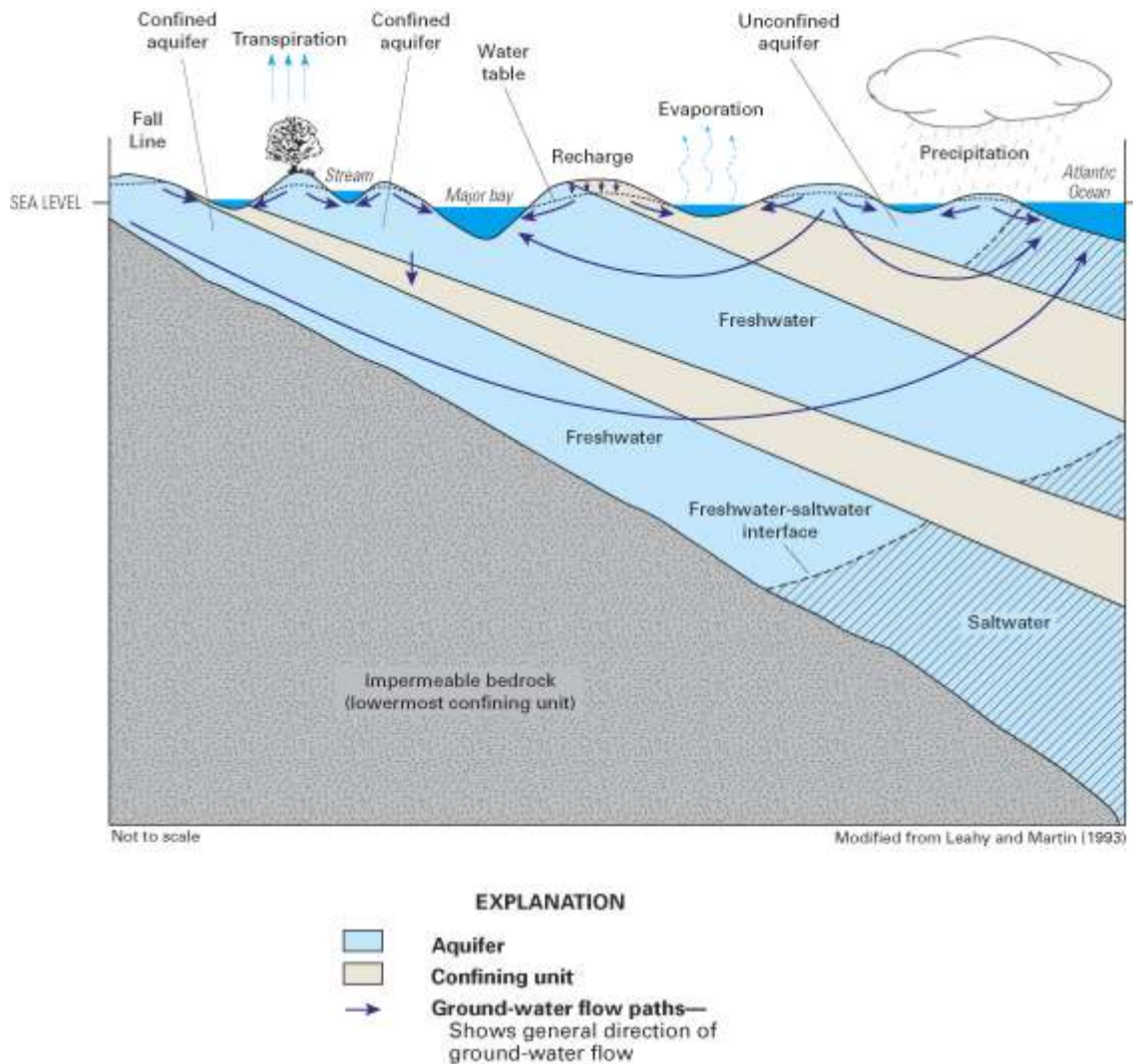


Figure 2. Seawater Wedge in a Layered Coastal Aquifer (from Barlow, 2003)

Figure 2 shows that under non-pumping conditions, the seawater interface in confined units can be located farther offshore than in surficial unconfined aquifers. The fresh water in an unconfined aquifer can flow readily into the ocean, allowing the seawater interface to exist near shore. Fresh water in the lower confined aquifers must seep out slowly through the overlying confining units. The slow seepage rates allow the fresh water to maintain pressure beneath the sea floor, pushing the seawater interface away from the coastline.



1.2 Groundwater Pumping and Seawater Intrusion

Pumping groundwater in a coastal aquifer reduces the amount of water discharging to the ocean. Sufficient pumping can eliminate ocean discharges, either locally or basin-wide, triggering seawater intrusion. The response of the seawater interface to groundwater pumping is manifested in two related ways: upconing and interface migration. Upconing refers to the ability of a pumping well to draw seawater up from below. Upconing only occurs if seawater exists directly below a pumping well. Because no seawater intrusion has been observed in the Seaside Groundwater Basin, upconing cannot occur, and only seawater interface migration will be further addressed in this report.

As mentioned earlier, groundwater pumping reduces the amount of fresh water outflow to the ocean. This allows the interface to migrate shoreward. Substantial pumping can allow the interface to move onshore, potentially impacting municipal wells, private wells, or agricultural wells. Figure 3 shows a two-dimensional cross section of how the fresh water/seawater interface may migrate in response to pumping.

As can be inferred from Figure 3, the degree of interface migration depends on the amount of water pumped from a particular aquifer, as well as the amount of leakage from overlying or underlying aquifers. Groundwater extracted from the lowest aquifer might be replaced by rainfall recharge, by seawater migrating shoreward, or by groundwater leaking from the overlying aquifer.

An additional issue that must be considered with seawater interface migration is the initial location of the seawater interface. An interface that starts far from the shore may take a considerable amount of time, often on the order of decades, to reach any production or monitoring well. Furthermore, the farther the interface is from the pumping well, the more area is available for fresh water to leak from overlying aquifers into the producing aquifer. This slows, or may completely stop, seawater intrusion in the pumped aquifer. Downward leakage, however, removes fresh water from overlying aquifers. This leakage may therefore exacerbate seawater intrusion in the overlying aquifer.

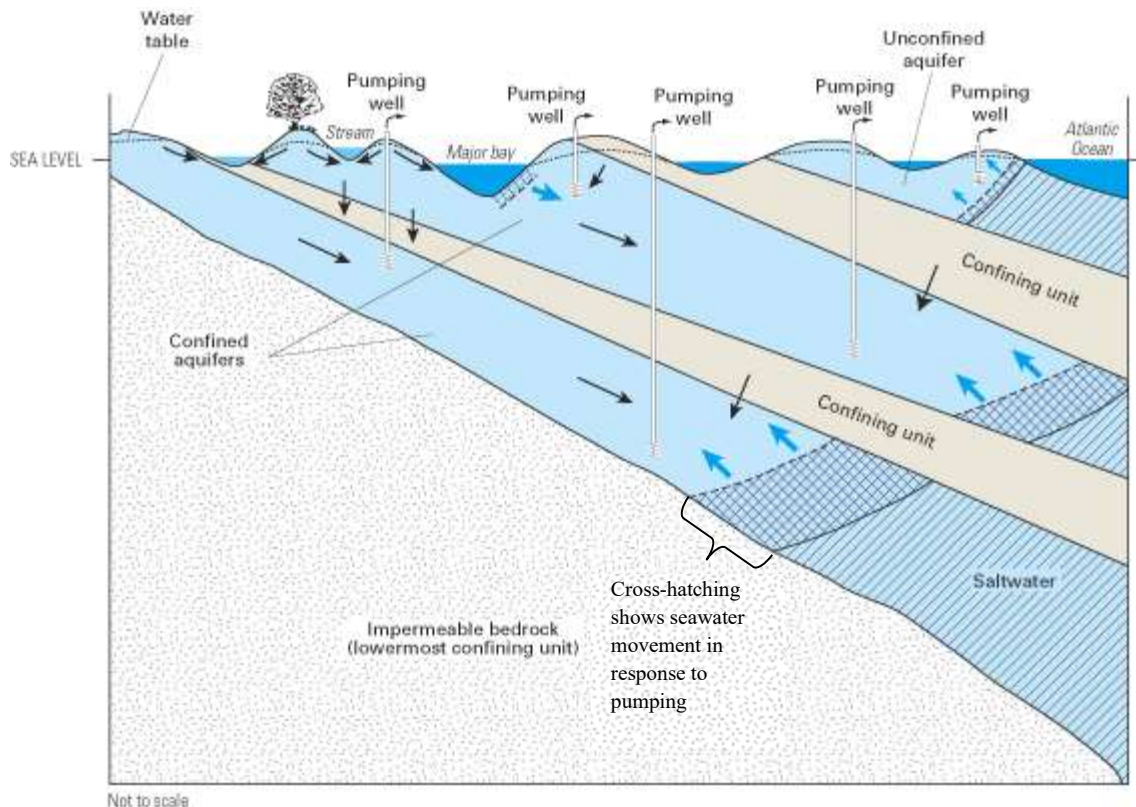


Figure 3. Interface Migration in Response to Groundwater Pumping
(from Barlow, 2003)

1.3 Indicators of Seawater Intrusion

Seawater intrusion is generally identified through chemical analyses of groundwater. Groundwater levels below or near sea level indicate an opportunity for seawater intrusion, but the actual seawater intrusion is indicated by various geochemical changes in groundwater.

No single analysis definitively identifies seawater intrusion, however by looking at various analyses we can ascertain when fresh groundwater mixes with seawater. At low chloride concentrations, it is often difficult to identify incipient seawater intrusion. This is due to the natural variation in fresh water chemistry at chloride concentrations below 1,000 milligrams per liter (mg/L) (Richter and Kreitler, 1993). Mixing trends between groundwater and seawater are more easily defined when chloride concentrations exceed 1,000 mg/L

Common geochemical indicators of seawater intrusion are discussed, and example analyses are presented, in the following sections.



1.3.1 Cation/Anion Ratios

Molar ratios of cations and anions can prove distinctive for various groundwater systems. Seawater intrusion is often indicated by graphically analyzing shifts in these molar ratios. Two common graphical techniques for these analyses are Piper diagrams and Stiff diagrams.

1.3.1.1 Piper Diagrams

Example Piper diagrams are shown for data from the Pajaro Valley and Salinas Valley on Figure 4 and Figure 5, respectively. These figures are included to demonstrate the utility of Piper diagrams, and show how they have been used in nearby basins. These figures are not provided for directly comparing data between basins; groundwater quality trends in one basin will not necessarily correlate with trends in other basins.

On these Piper diagrams, the relative abundances of individual cations and anions are plotted in the left and right triangles, respectively, and their combined distribution is plotted in the central diamond. Waters from similar or related sources will generally plot together. The mixture of two waters will generally plot along a straight line between the two end-member types within the central diamond. The trend towards seawater intrusion, however, often plots along a curved path as shown on Figure 4. The red arrows track the evolution of water chemistry from freshwater to seawater. Often only the first, upward leg of this curve is observed, because wells become too saline to use before reaching the downward leg, and sampling is usually discontinued.

1.3.1.2 Stiff Diagrams

Example Stiff diagrams from the Salinas Valley are shown on Figure 6 and Figure 7. These figures are included to demonstrate the utility of Stiff diagrams, and show how they have been used in nearby basins. On Stiff diagrams, the relative abundances of individual cations are plotted on the left side of the graph, and the relative abundances of anions are plotted on the right side of the graph. Waters with similar chemistries will have similarly shaped Stiff diagrams.

Figure 6 shows Stiff diagrams characteristic of the unintruded portions of the Salinas Valley Pressure 400-Foot Aquifer. By contrast, Figure 7 shows Stiff diagrams from the intruded portion of the Salinas Valley Pressure 400-Foot Aquifer. The significantly higher chloride levels in the intruded aquifer result in the noticeable spike at the upper right-hand side of the Stiff diagrams on Figure 7. This spike is indicative of incipient seawater intrusion.

The Stiff diagrams shown on Figure 7 are from wells that have acknowledged seawater intrusion, based on multiple lines of evidence. The Stiff diagrams alone are often not sufficient to identify seawater intrusion because there is no standard for Stiff diagram shapes; the diagrams are most useful as a comparative tool, showing the evolution of water chemistry over time and space. The

shape of these Stiff diagrams is considered indicative of seawater intrusion in Salinas Valley only because considerable data analyses have shown that locally, Stiff diagrams adopt this shape as seawater encroaches.

The Stiff diagrams of seawater intruded wells shown on Figure 7 show calcium concentrations greater than sodium concentrations, in spite of the fact that sodium is the dominant cation in seawater. Incipient seawater intrusion is often characterized by increasing calcium and decreasing sodium, due to cation exchange between sodium and calcium on the aquifer material. This concept is discussed further on page 14.

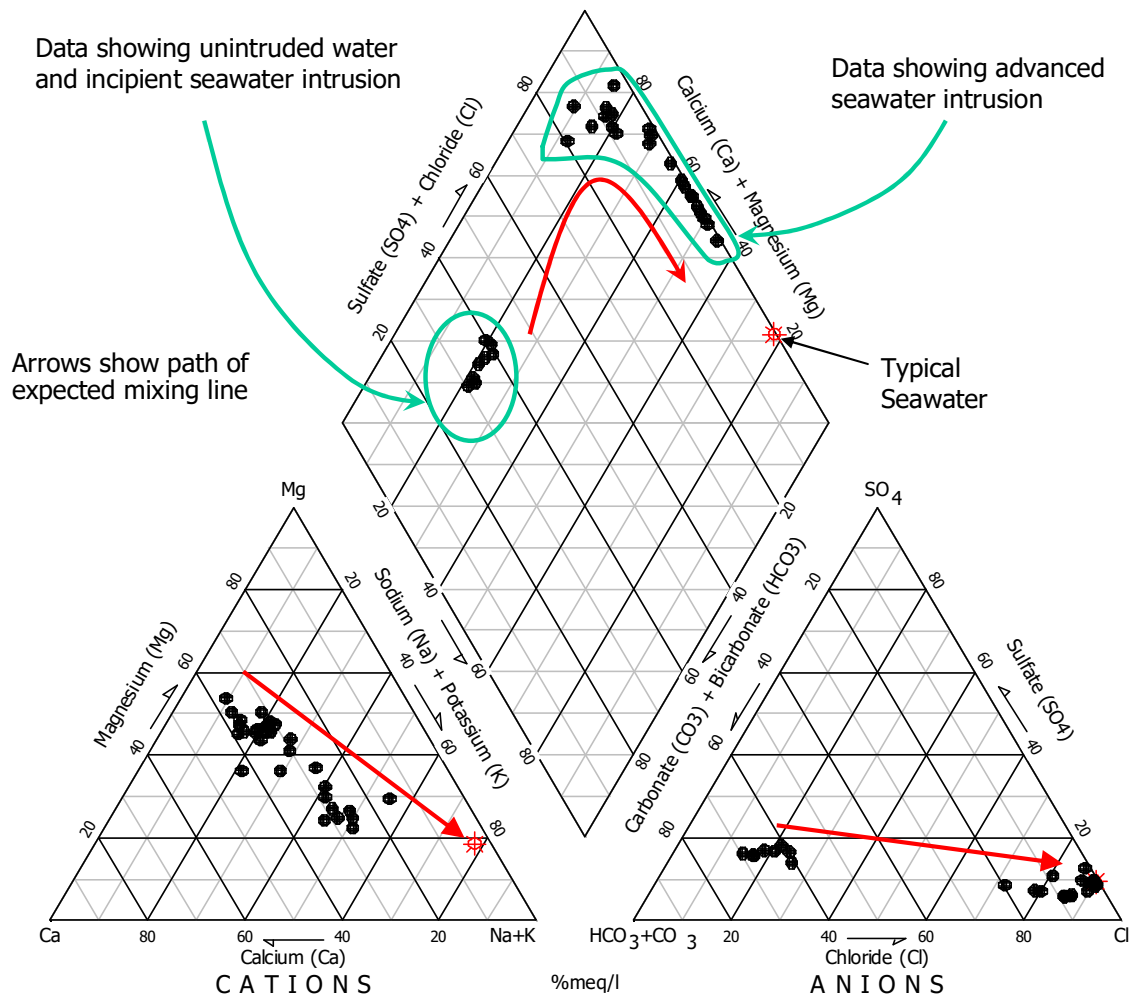


Figure 4. Piper Diagram for Groundwater in Pajaro Valley
 (Data source: PVWMA)

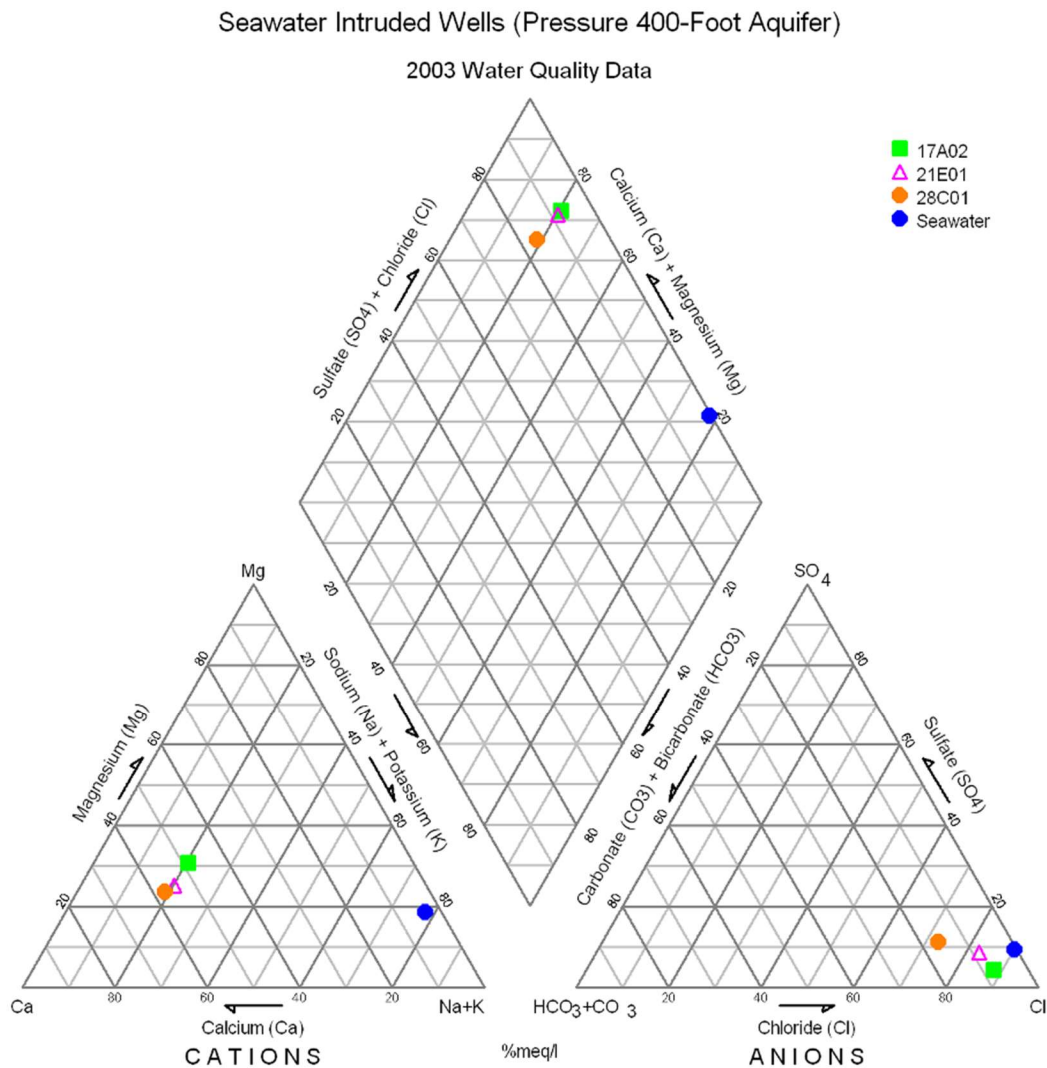


Figure 5. Piper Diagram for Groundwater in Salinas Valley
 (Source: MCWRA)

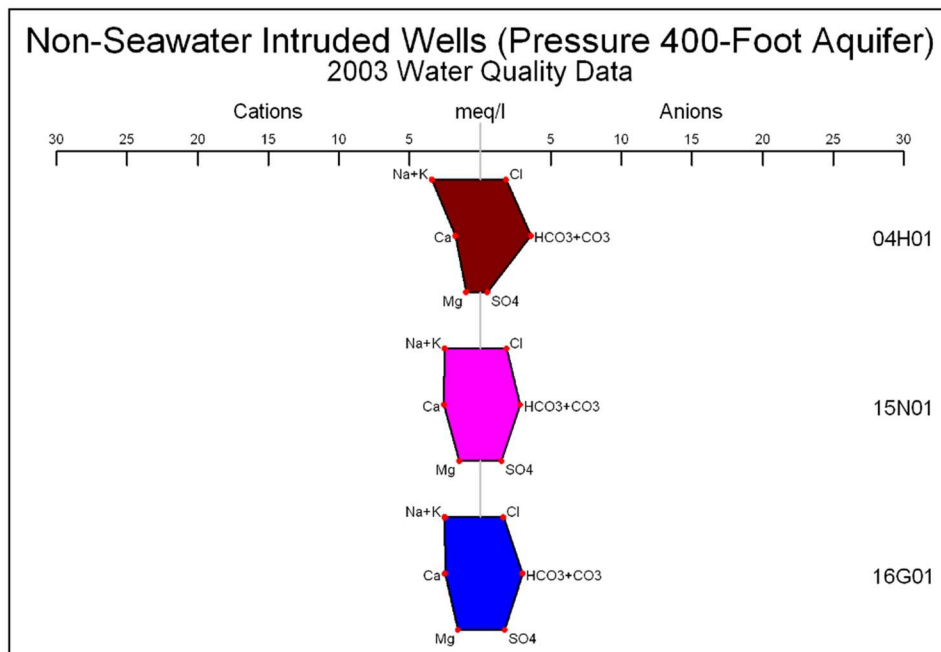


Figure 6. Stiff Diagrams from Salinas Valley Wells without Seawater Intrusion
 (Source: MWCRA)

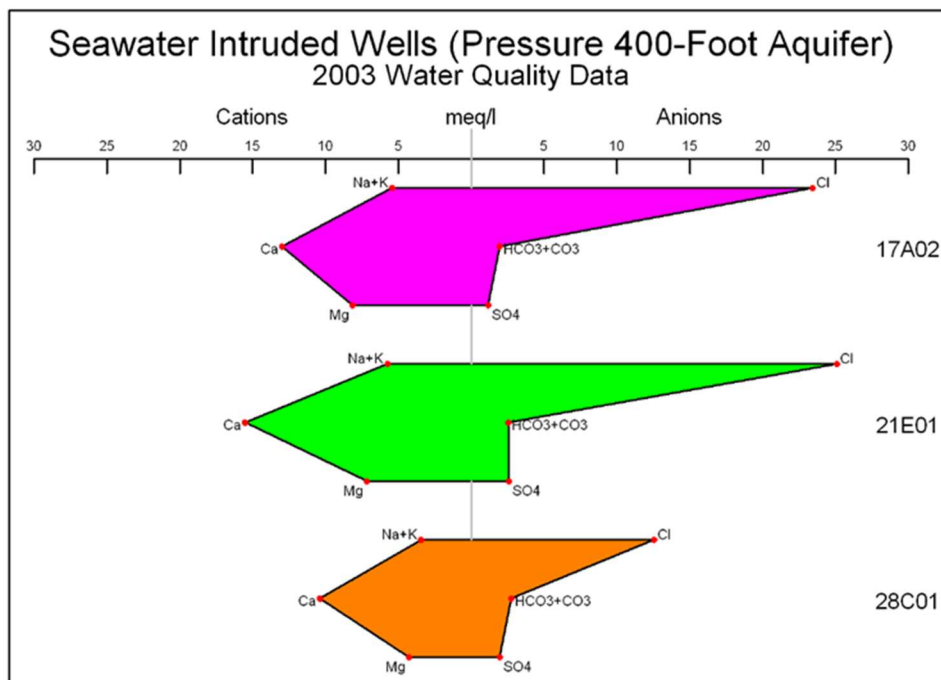


Figure 7. Stiff Diagrams from Salinas Valley Wells with Seawater Intrusion
 (Source: MWCRA)



1.3.2 Increasing Chloride Concentrations

Seawater is chloride rich, whereas bicarbonate or sulfate are the dominant anions in many groundwater systems. Steadily increasing chloride concentrations over time is the one of the most commonly used indicators of seawater intrusion. At low chloride concentrations, trends are often as important as absolute concentrations because of natural variations in groundwater chemistry. As an example, in 2004 the coastal shallow Pacific Cement Aggregates (PCA) West well had a chloride concentration of 46 mg/L, whereas the much more inland well 2701882-016, located in the Laguna Seca subarea, had a chloride concentration of 225 mg/L. The higher chloride concentration in well 2701882-016 is fairly consistent, showing no increasing trend, and is clearly not an indicator of seawater intrusion.

Example graphs showing historical chloride concentration increases indicative of seawater intrusion are shown on Figure 8 and Figure 9. Figure 8 graphs steadily increasing chloride concentrations in a shallow well in the Salinas Valley. Figure 9 graphs increasing chloride concentrations in a well in the Pajaro Valley. Both of these graphs show that the rise in chlorides is a lengthy and persistent process; chloride concentrations began to increase in the representative Salinas Valley well in 1982, and took six years before exceeding the Safe Drinking Water Act secondary drinking water standard of 250 mg/L. This long-term and relatively slow increase in chlorides suggests that while chloride concentrations are strongly indicative of seawater intrusion, it often takes time for the increasing chloride trend to be recognizable.

1.3.3 Sodium/Chloride Molar Ratios

As mentioned earlier in this report, sodium often replaces calcium on the aquifer matrix through ion exchange in advance of the seawater front. This effectively removes sodium from the water, and sodium/chloride ratios drop in advance of the seawater front. This can sometimes be used as an early indicator of seawater intrusion. Sodium/chloride ratios can also be used to differentiate between seawater intrusion and other sources of saltwater. Jones et al. (1999) suggest that sodium/chloride ratios in advance of a seawater intrusion front will be below 0.86 (molar ratio). This distinguishes seawater intrusion from domestic waste water, which typically has sodium/chloride ratios above 1.

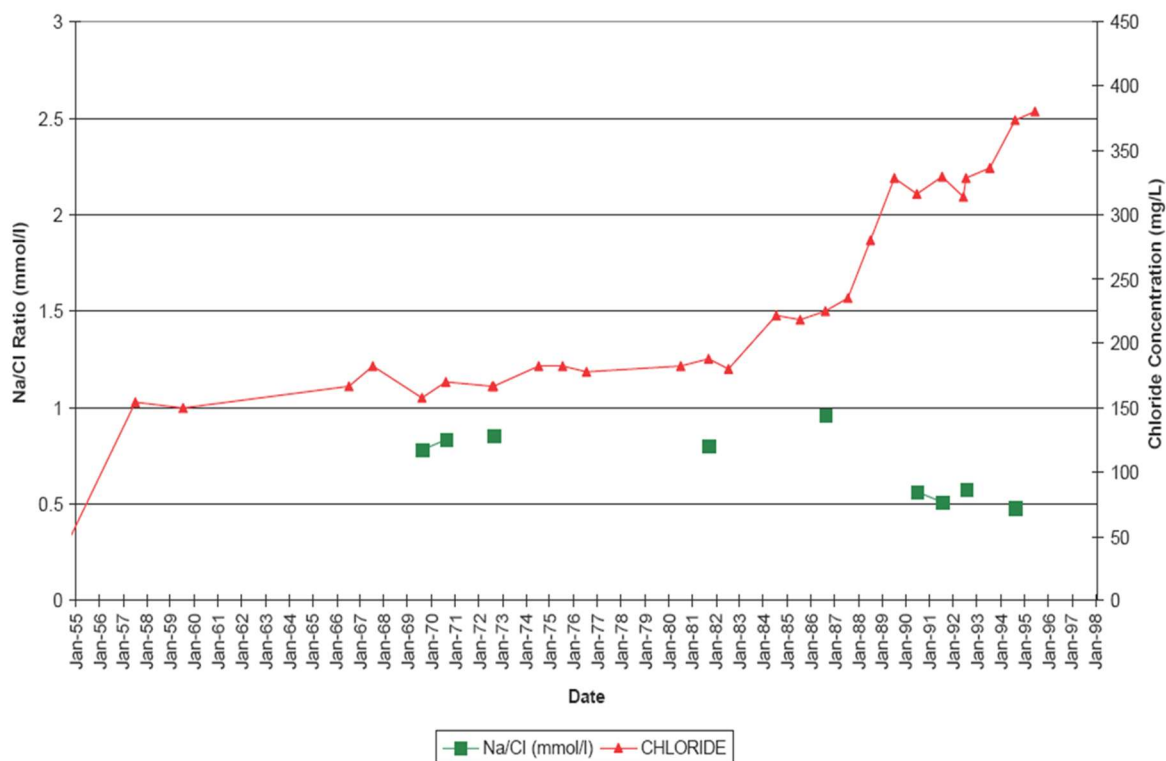


Figure 8. Historical Chloride Concentrations and Sodium/Chloride Ratios for a Well in Salinas Valley Showing Incipient Intrusion (Source: MCWRA)

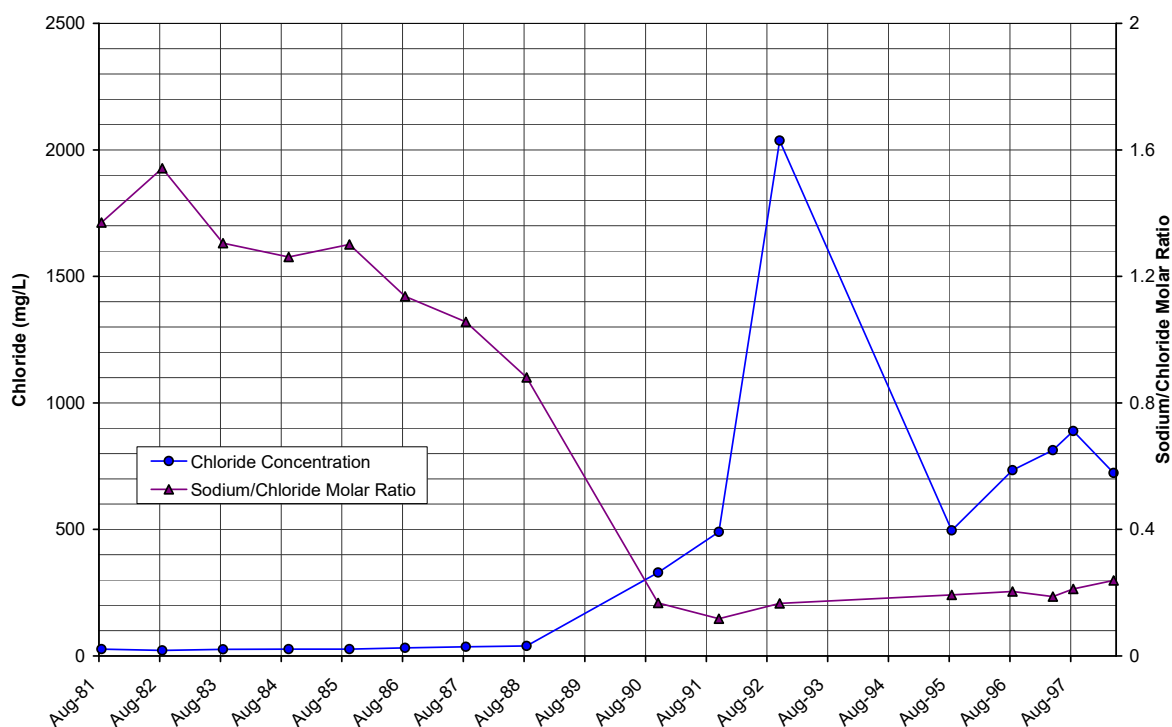


Figure 9. Historical Chloride Concentrations and Sodium/Chloride Ratios for a Well in Pajaro Valley Showing Incipient Intrusion (Data source: PVWMA)



In addition to plotting increasing chloride concentrations, decreasing sodium/chloride ratios are plotted on Figure 8 and Figure 9. The strong correlation between the two indicators of seawater intrusion can be observed on these two figures. The potential utility of sodium/chloride ratios as an early indicator of seawater intrusion is shown on Figure 9. This figure shows that by August 1988, chloride concentrations in the Pajaro Valley well had remained relatively constant, yet sodium/chloride ratios were beginning to drop, suggesting incipient seawater intrusion. By September 1990, the rising chloride levels can be clearly correlated to dropping sodium/chloride ratios; definitively associating the high chlorides with seawater intrusion.

1.3.4 Chloride-Bicarbonate Ratios

The ratio of chloride to bicarbonate-plus-carbonate contrasts the relative abundance of the dominant seawater and freshwater anions. As a ratio of concentrations expressed in mg/L, the ratio for seawater exceeds 100 and values for groundwater unaffected by seawater are generally less than 0.3. For groundwater with relatively low total dissolved solids, this ratio provides little benefit over evaluating chloride concentrations alone; and therefore is not used in the current analyses.

1.3.5 Electric Induction Logs

Changes in formation salinity can be measured from within a well using electric induction logging. Induction logging within the well measures the fluid conductivity within the adjacent formation up to a distance of three feet from the well casing. This technique can be used in wells that are completed with PVC casings and screens.

This method can be used as a cost-effective method of detecting seawater intrusion by measuring the electrical conductivity of the formation throughout the depth of the well. If over time, the conductivity increases relative to the baseline value, it could indicate seawater intrusion. One limitation of this method is that it does not provide concentrations of chloride or other ions that contribute to salinity. Therefore, the use of electric induction logs can only be used qualitatively.

Induction logging has been performed on the Watermaster's coastal Sentinel Wells since their completion in 2007.



1.3.6 Other Indicators

Hem (1989) suggested several other indicators for seawater intrusion, including the concentration ratio of calcium to magnesium (approximately 0.3 in seawater and greater in fresh water); the percentage of sulfate among all ions (approximately 8 percent in seawater and larger in fresh water); and the concentrations of minor constituents such as iodide, bromide, boron, and barium. These other indicators are not used in the current analyses for two reasons:

1. The analyses presented in the following sections overwhelmingly suggest that seawater intrusion has not advanced onshore in the Seaside Groundwater Basin.
2. No historical data exists for the minor constituents such as iodide and barium; and only limited historical data exist for bromide and boron. It should be noted that since 2012, the Watermaster has been analyzing samples from selected coastal monitoring and production wells for iodide, bromide, boron, and barium.

Using the other indicators mentioned above is not necessary in light of there being other methods available for indicating seawater intrusion, as discussed in the preceding sections. Should the other methods start showing seawater intrusion, the minor constituents of iodide, bromide, boron, and/or barium will be included in future water quality analyses so that they can be used as supplemental indicators.



2 SEAWATER INTRUSION IN THE SEASIDE GROUNDWATER BASIN

The geochemical criteria discussed above, along with various maps showing spatial distributions of concentrations, can be used to estimate the presence or lack of seawater intrusion in the Seaside Groundwater Basin. While no single analysis is a definitive indicator of seawater intrusion, the combined weight of all analyses may be instrumental in detecting seawater intrusion.

2.1 Analysis Approach

As was used in previous Seawater Intrusion Analysis Reports (RBF, 2007; HydroMetrics LLC, 2008; HydroMetrics LLC, 2009a; HydroMetrics WRI, 2010; HydroMetrics WRI, 2011; HydroMetrics WRI, 2012a; HydroMetrics WRI, 2013a; HydroMetrics WRI, 2014; HydroMetrics WRI, 2015; HydroMetrics WRI, 2016b; HydroMetrics WRI, 2017b, Montgomery & Associates, 2018b, Montgomery & Associates, 2019), this SIAR includes a number of approaches to evaluate seawater intrusion. Results from all groundwater quality testing in WY2020 are included in Appendix A.

Data for the 2nd quarter of Water Year 2020 (sampled and measured January-March 2020) and 4th quarter of Water Year 2020 (sampled and measured July-September 2020) are analyzed and mapped to show the spatial distribution of groundwater quality and groundwater elevations. In addition to spatial mapping, historical data are graphed to assess geochemical trends. Data from the 2nd quarter represent conditions during the wet time of the year; data from the 4th quarter represent conditions during the dry time of the year. In some cases when samples or measurements are not collected strictly within the 2nd or 4th quarter, the quarter in which they were collected is provided with the data.

Where possible, analyses are separated by depth zone. Two depth zones have been chosen, following the system of Yates et al. (2005). Wells assigned to the shallow depth zone generally correlate to the Paso Robles Formation where it exists. This shallow zone is roughly at the same depth as the Salinas Valley Pressure 400-Foot Aquifer. Wells assigned to the deep zone correlate with the Santa Margarita Sandstone where it exists in the Seaside Groundwater Basin. The deep zone is roughly at the same depth as the Salinas Valley Pressure Deep Aquifers.

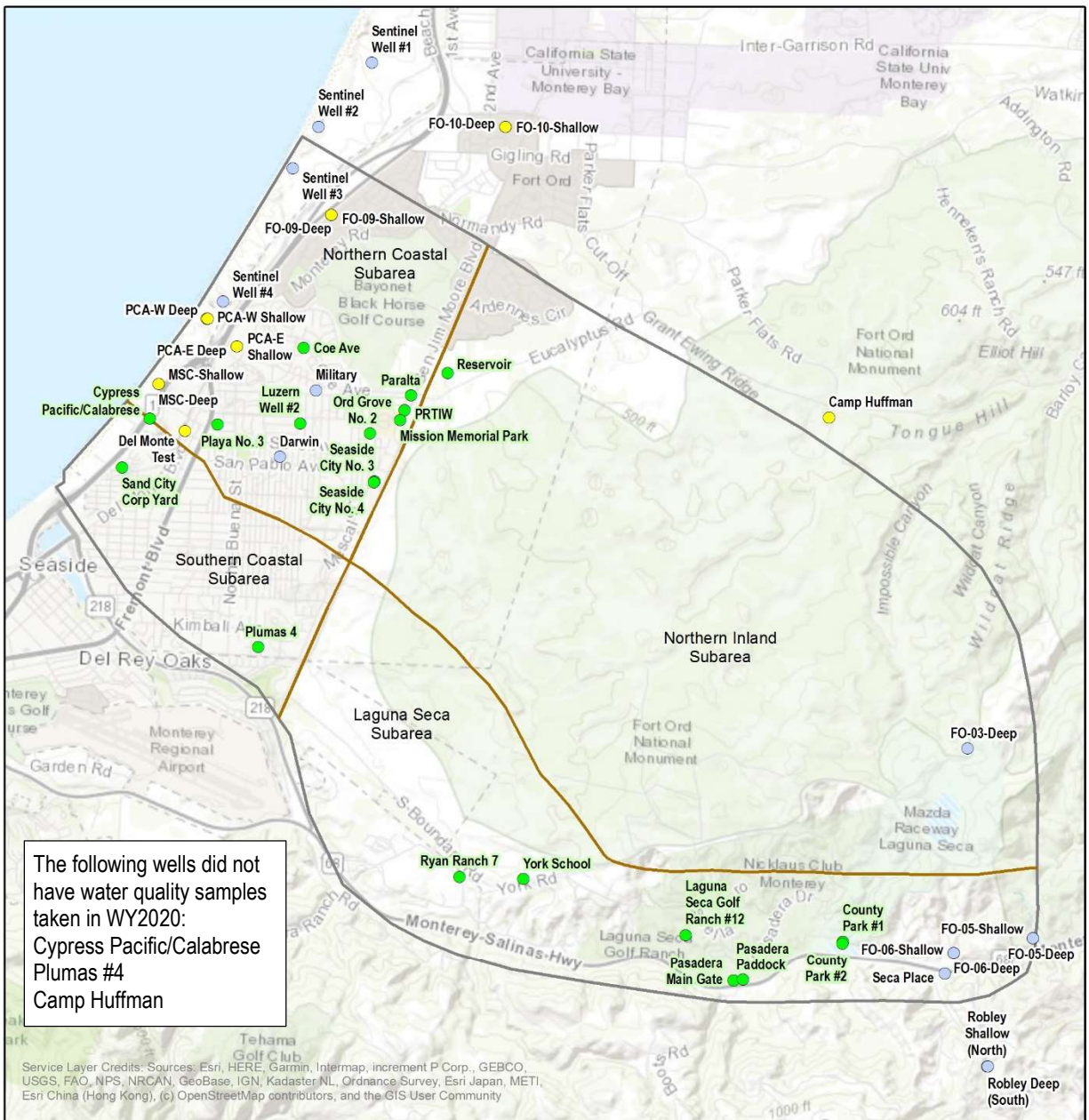


2.2 Cation/Anion Ratios

For Water Year 2020, 12 monitoring wells and 14 production wells were used for geochemical trend analyses. Locations of all monitoring and production wells used in the SIAR analysis are shown on Figure 10. Some of the production wells that were included in previous years' analysis are not included in the analysis this year because they have not been pumped during the year and thus not sampled. Groundwater quality data are no longer collected in the Sentinel Wells for seawater intrusion analysis because in early 2017, it was concluded that groundwater samples collected using the low flow sampler were more representative of water within the well casing and not from the groundwater in the aquifer surrounding the well.

Eleven monitoring wells used in this analysis represent one or both well pairs from the MPWMD monitoring well network and one is an observation well (Figure 10). A well pair comprises two wells drilled in close proximity to one another: one perforated in the shallow zone and the other perforated in the deep zone. Each well pair is represented with a unique color and symbol on Piper and Stiff diagrams.

The production wells included in the analysis are water purveyor wells that are sampled annually for general inorganic minerals per the Seaside Basin Monitoring and Management Program (Seaside Groundwater Basin Watermaster, 2006). The current schedule includes sampling selected coastal monitoring wells quarterly. All other monitoring and production wells are sampled annually during the 4th quarter. Where samples are not available for analysis, the text and figures indicate as such.



EXPLANATION

- Monitoring Wells used for Groundwater Levels
- Monitoring Well with Water Level and Quality Data
- Production Well with Water Level and Quality Data
- Adjudicated Seaside Groundwater Basin Boundary
- Basin Boundary
- Subarea Boundary

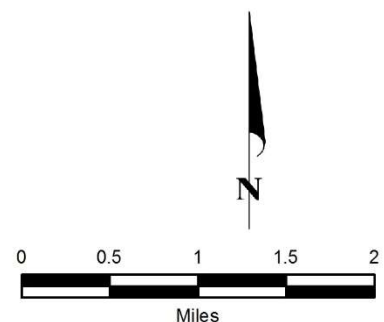


Figure 10. Wells Used for Seawater Intrusion Analyses



2.2.1 Second Quarter Water Year 2020 (January-March 2020)

A Piper diagram displaying analyses from six monitoring wells in the Seaside Groundwater Basin for the 2nd quarter Water Year 2020 (January-March 2020) is shown on Figure 11.

Analyses from only six wells are shown because the Sentinel Wells are no longer sampled for groundwater quality (only used for induction logging), and most of the monitoring well pairs are not sampled during this quarter; they are only sampled annually in the 4th quarter. Appendix C includes individual Piper diagrams for each well to track their chemistry over time. Note that bicarbonate (HCO_3) presented on Piper and Stiff diagrams is derived from Total Alkalinity (as CaCO_3).

The monitoring wells generally cluster in a single area on the Piper diagram that is consistent with previous data. The location on the Piper diagram indicates that groundwater from both the deep and shallow well pairs straddle the sodium-chloride and sodium-bicarbonate type water¹. On Figure 11, monitoring well FO-9 Shallow plots differently than the other wells on the Piper diagram. For more detail on chloride concentrations for this well, Appendix D: Figure D-11 shows that the last three samples from this well, all taken within this water year, indicate a greater concentration of chloride than in previous water years. Additionally, the last six chloride sampling events at this well, from water years 2019 and 2020, have been above the historical average.

Stiff diagrams for the monitoring wells sampled during the 2nd quarter of Water Year 2020 are shown in the left column on Figure 12 through Figure 14. None of the Stiff diagrams, including monitoring well FO-09 Shallow, show the high chloride spike shown on Figure 7 that indicates seawater intrusion. The Stiff diagrams for monitoring wells FO-9 Shallow and FO-10 Shallow do, however, show a slightly different shape than other shallow wells because of their increased chloride. Typically, in the coastal area of the Seaside Basin, shallow groundwater chloride anions have a lower equivalent concentration than HCO_3 , but in Water Year 2020 there is a greater chloride equivalent concentration than HCO_3 .

¹ Where the data points fall in the Piper diagram triangle for anions and the triangle for cations determines the type of water. For example, if the points plot in the lower right corner of the anion triangle, the water is classed as chloride type water.

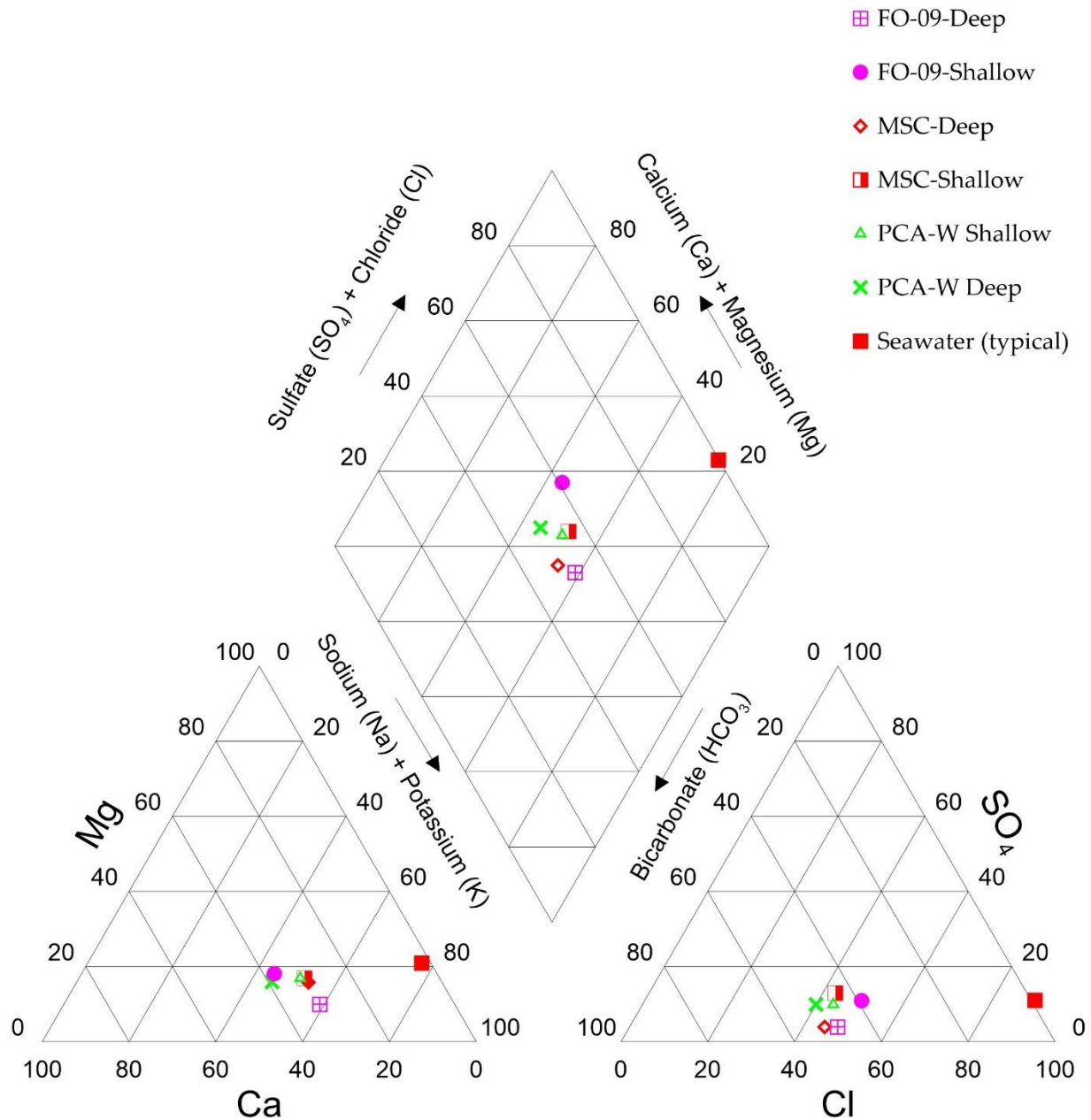


Figure 11. Piper Diagram for Seaside Groundwater Basin Monitoring Wells,
 2nd Quarter Water Year 2020 (January-March 2020)
 (Data source: Watermaster)

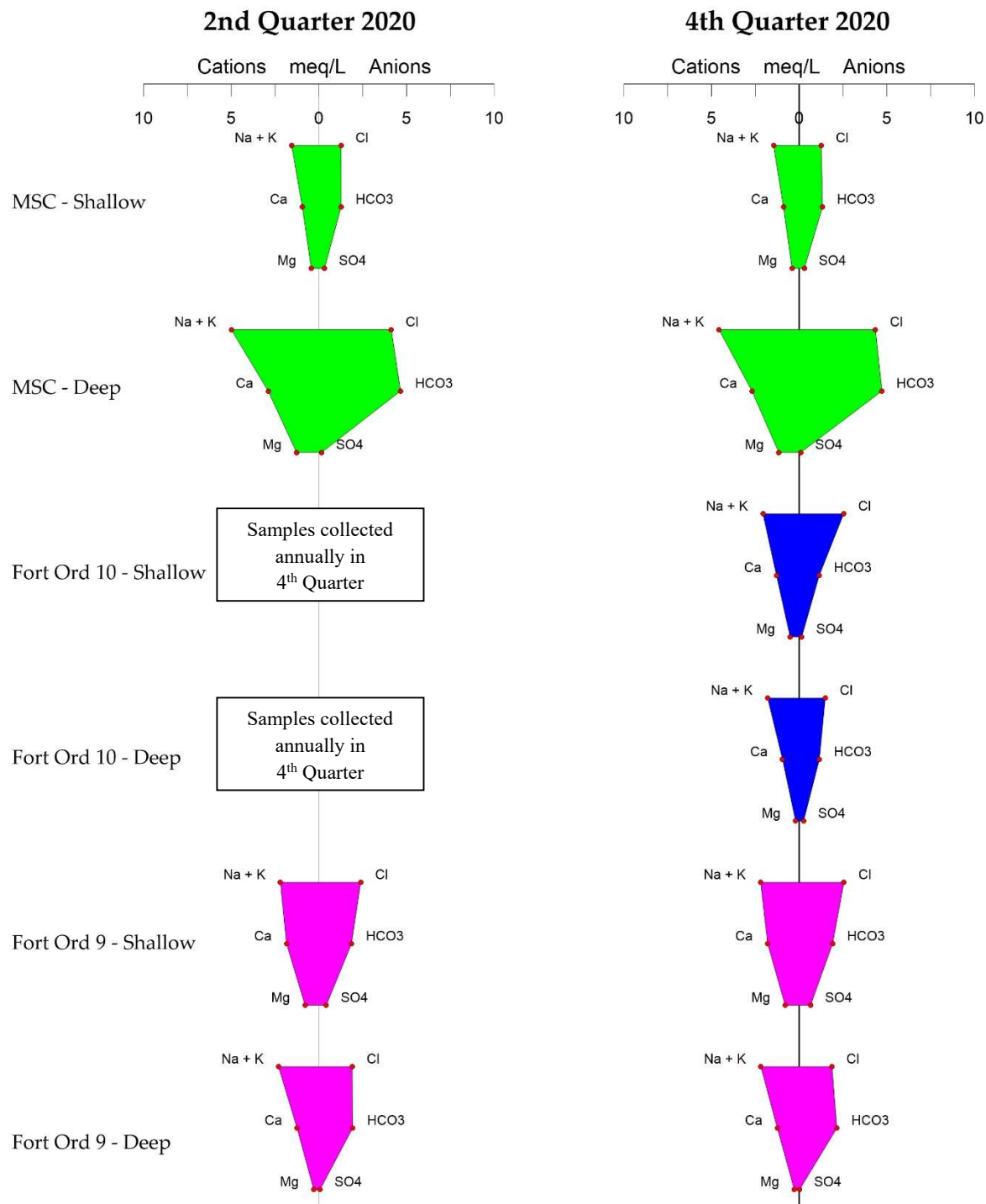


Figure 12. Stiff Diagrams for MSC, Fort Ord 9, and Fort Ord 10 Wells
 (Data source: Watermaster)

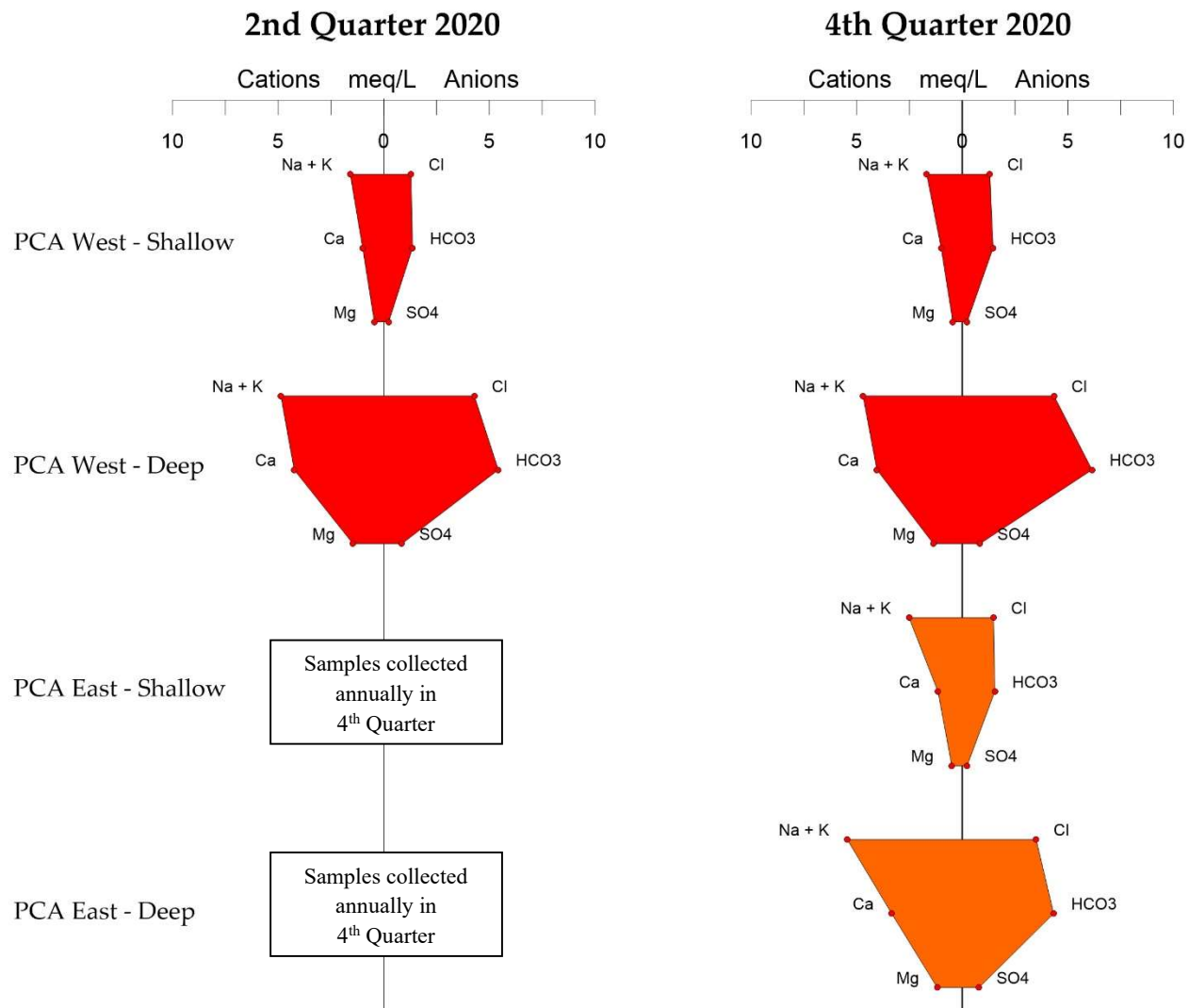


Figure 13. Stiff Diagrams for PCA West and PCA East Wells
 (Data source: Watermaster)

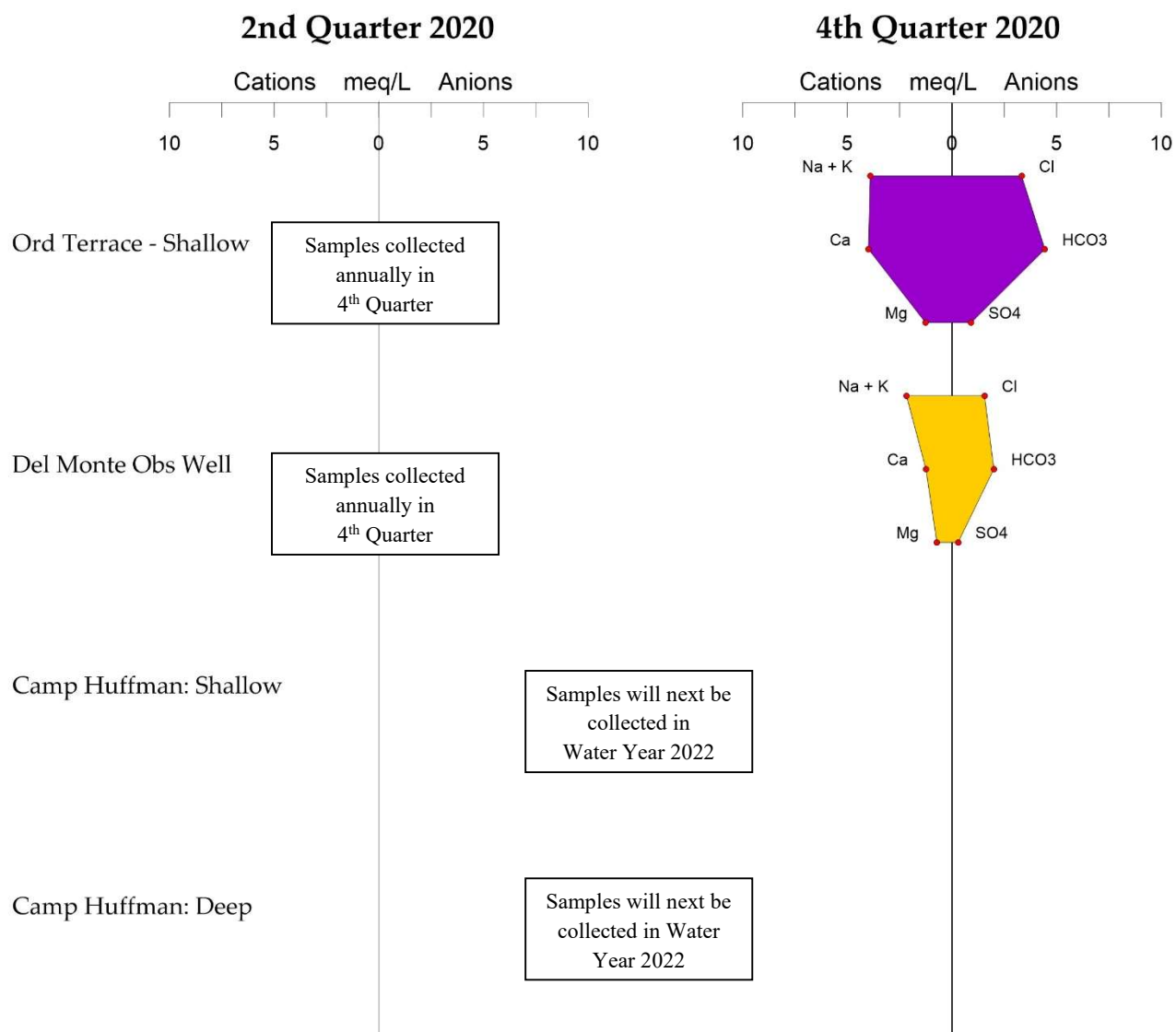


Figure 14. Stiff Diagrams for Watermaster Ord Terrace, Del Monte, and Camp Huffman Wells
(Data source: Watermaster and MPWMD)



2.2.2 Fourth Quarter Water Year 2020 (July-September 2020)

Piper diagrams displaying groundwater quality data from 12 monitoring wells and 14 production wells in the Seaside Groundwater Basin for the 4th quarter of Water Year 2020 (July-September 2020) are shown on Figure 15 and Figure 16, respectively. Appendix C includes individual Piper diagrams for each well to show trends over time.

Figure 15 shows groundwater quality data for the monitoring wells clustering generally in a single area on the Piper diagram. Groundwater is generally of a sodium-chloride/sodium-bicarbonate type and is not impacted by seawater. Monitoring wells FO-9 Shallow and FO-10 Shallow plot differently on both Piper (Figure 15) and Stiff (Figure 12) diagrams due to higher chloride than most other wells.

Figure 16 presents a Piper diagram for 4th quarter groundwater from production wells. The production wells plot in roughly the same location on the Piper diagram as the majority of monitoring wells on Figure 15. The variation of the plot location on the Piper diagram for production wells is due to higher sulfate and chloride anions than in the monitoring wells. Groundwater from these wells is characterized as sodium-sulfate-chloride type waters. The York School well plots closest to typical seawater on this diagram, however its inland location precludes seawater intrusion as the cause for the observed water chemistry at this well. Overall, the Piper diagrams show no indication of seawater intrusion at any of the production wells.

The Sand City's Public Works Corp Yard production well Piper diagram shows that its cations, namely calcium, sodium, and potassium, vary while the anions remain more stable (Appendix C: Figure C-15). Initially it was thought this well's chemistry was evolving over time; but after multiple years of monitoring, it appears that the relative percentage of cations varies between fixed points and is not evolving in one direction only. The source of this variance is not seawater because it does not follow the pattern depicted on Figure 4 and Figure 5.

Stiff diagrams for the 12 monitoring wells sampled during the 4th quarter of Water Year 2020 are shown in the right column on Figure 12 through Figure 14. The shapes of the Stiff diagrams for the paired monitoring wells are similar to the shapes of the Stiff diagrams for the majority of prior years, with the exception of FO-9 Shallow and FO-10 Shallow that have greater chloride equivalent concentration than HCO_3 , compared to other shallow coastal wells.

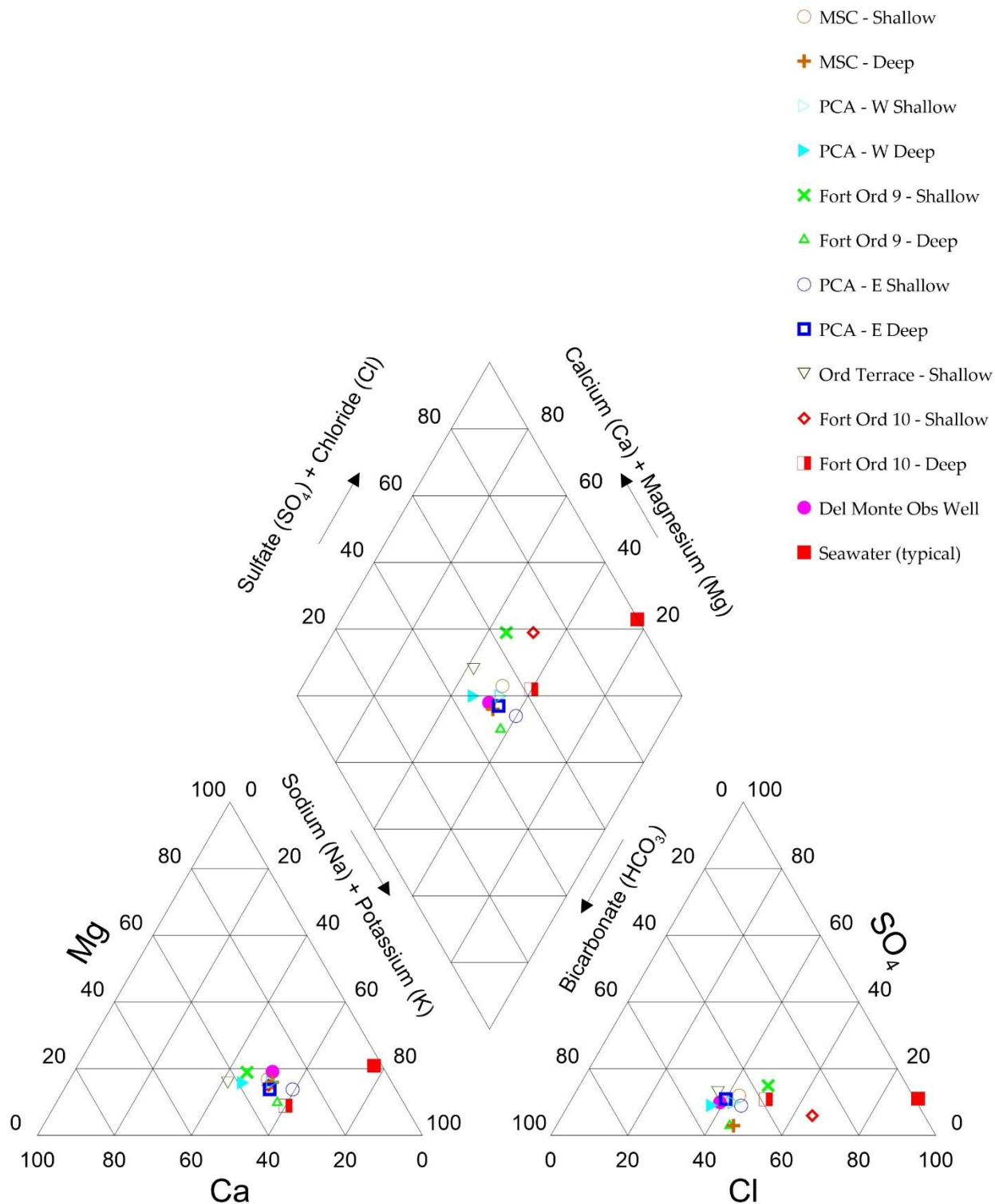


Figure 15. Piper Diagram for Seaside Groundwater Basin Monitoring Wells,
 4th Quarter Water Year 2020 (July- September 2020)
 (Data source: Watermaster)



■ Sand City Corp. Yard

△ York School

× Pasadera Paddock

● LS County Parks #1

▣ Playa No. 3

+ Luzern #2

◆ Ord Grove #2

■ Mission Memorial (formerly PRTIW)

☆ Laguna Seca Golf #12

★ Ryan Ranch Well 7

■ Coe

● Bayonet Blackhorse

△ Seaside #4

■ Seawater (typical)

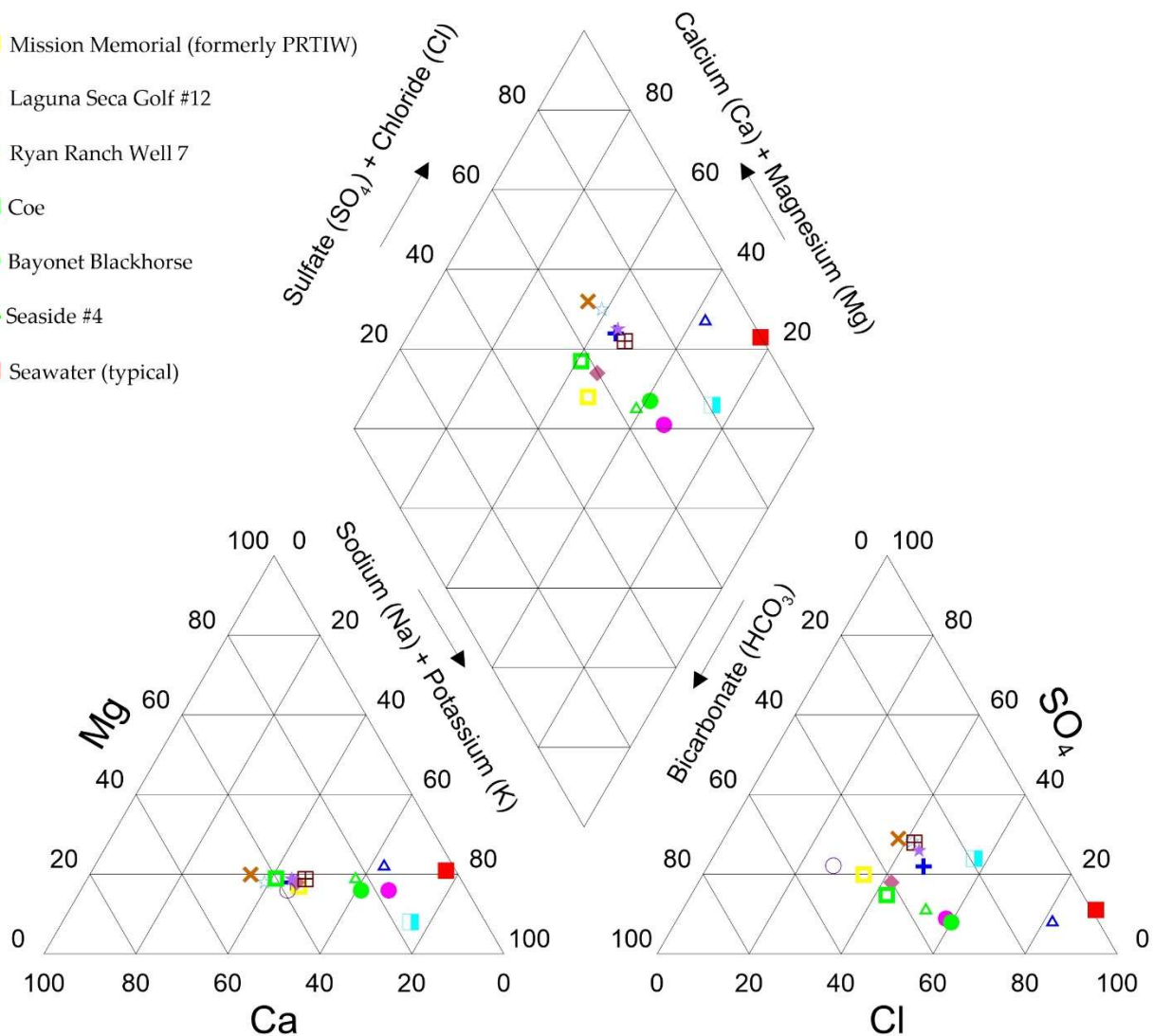


Figure 16. Piper Diagram for Seaside Groundwater Basin Production Wells,
4th Quarter Water Year 2020 (July-September 2020)
(Data source: Watermaster)



Stiff diagrams for the 14 production wells sampled during the 4th quarter of Water Year 2020 are shown on Figure 17 through Figure 20. Production well Stiff diagrams show no significant changes from the shapes observed in previous years. The Pasadera Paddock and LS Golf #12 production wells have a Stiff diagram shape that are slightly different from the other wells' chemistry. The cause of this could be localized mineralization. The Laguna Seca subarea is known to have higher salinity groundwater than the rest of the basin due to the underlying Monterey shale that was deposited in a marine environment. None of the Stiff diagrams for production wells show the high chloride spike shown on Figure 7 that indicates seawater intrusion.

The Sand City's Public Works Corp Yard production well in the Southern Coastal subarea (Figure 17) and the York School production well in the Laguna Seca subarea (Figure 18) both have Stiff diagrams quite different from most other wells' groundwater quality (Figure 18). Although the shapes are different, they do not display the large chloride spike associated with seawater intrusion as shown on Figure 7. None of the production wells analyzed using Stiff and Piper diagrams show an indication of seawater intrusion.

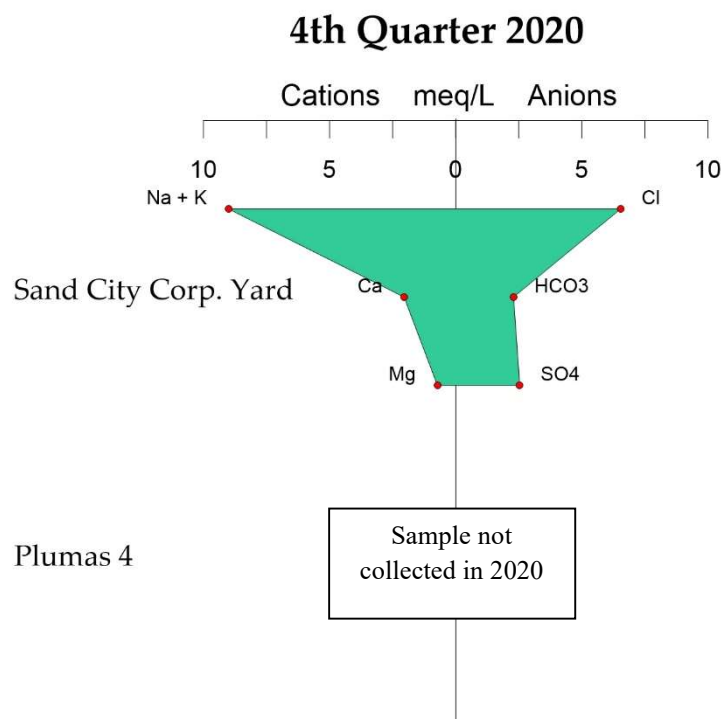


Figure 17. Stiff Diagrams for Southern Coastal Subarea Production Wells
(Data source: Watermaster)

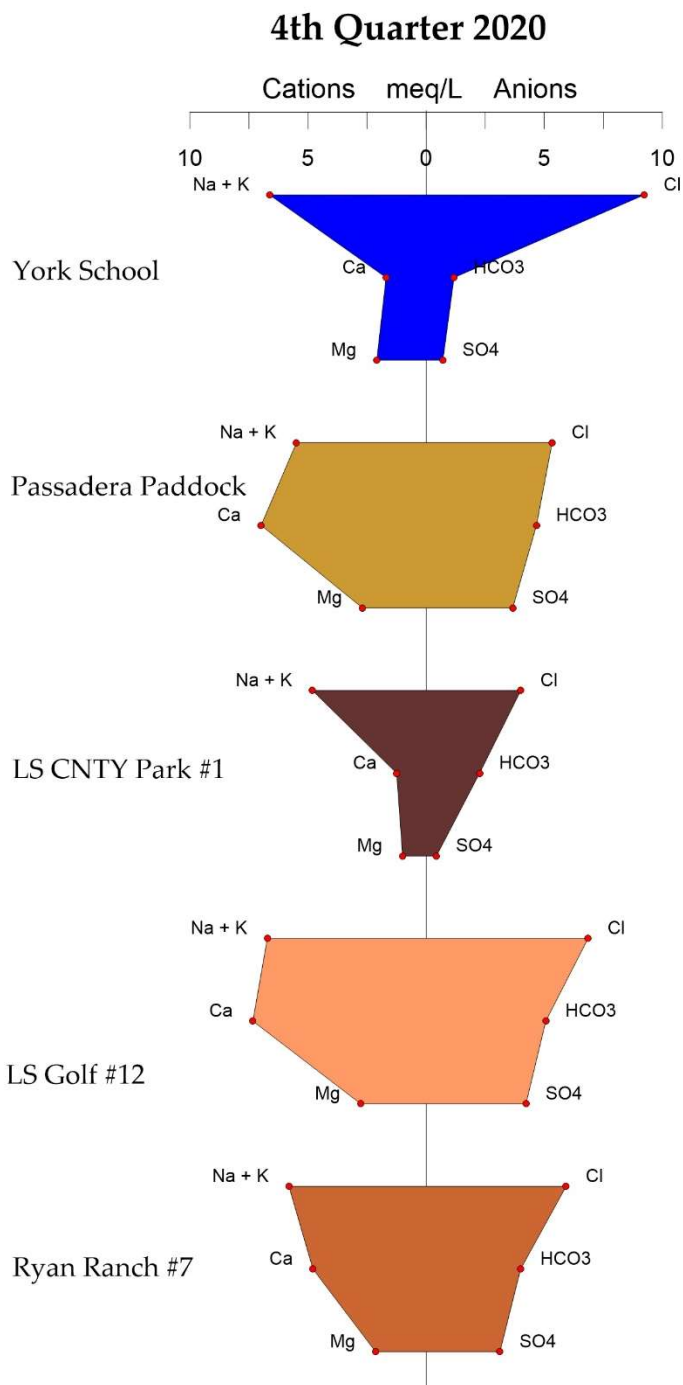


Figure 18. Stiff Diagrams for Laguna Seca Subarea Production Wells
 (Data source: Watermaster)

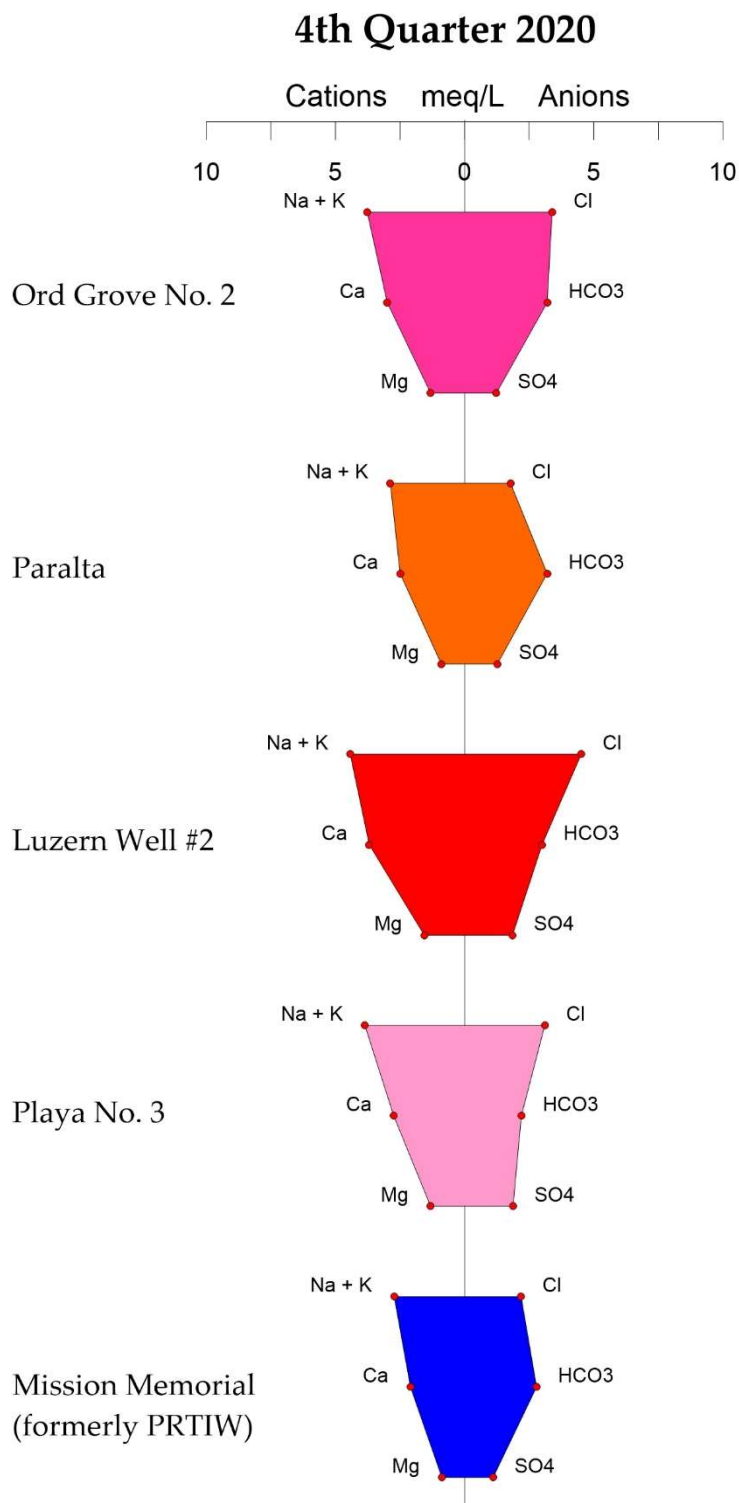


Figure 19. Stiff Diagrams for Northern Coastal Subarea CAWC and Mission Memorial Production Wells
 (Data source: Watermaster)

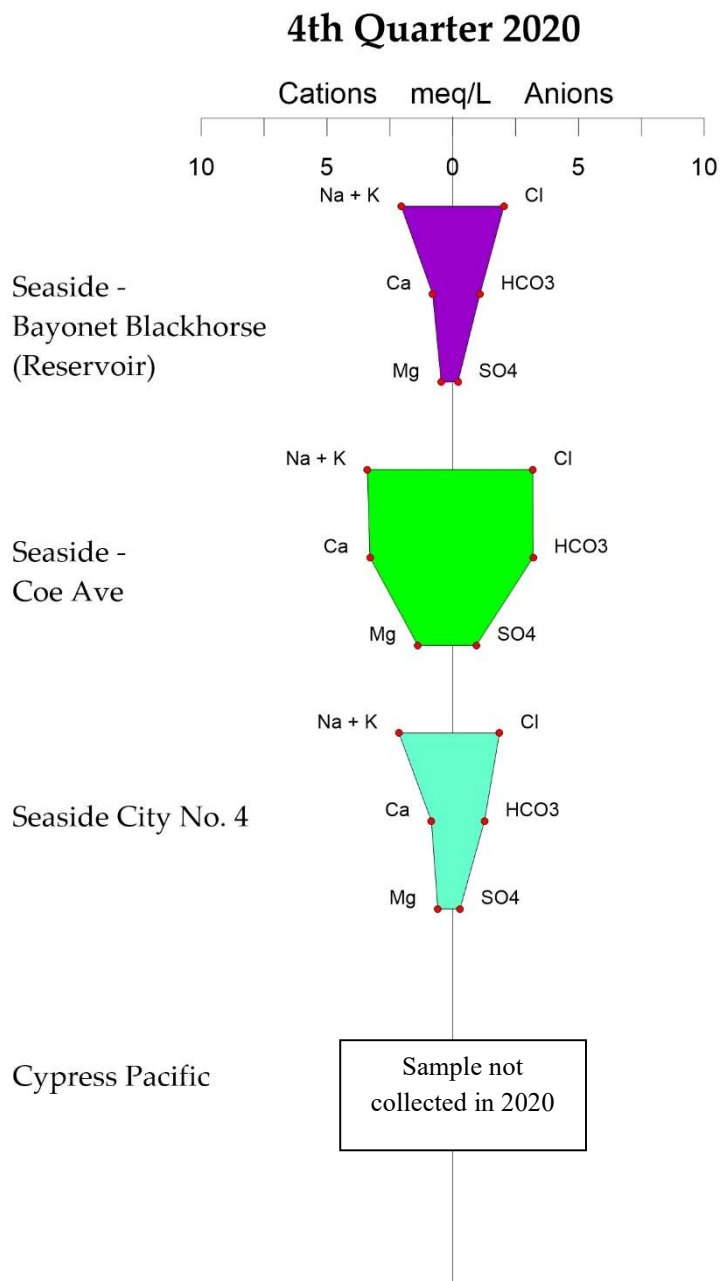


Figure 20. Stiff Diagrams for Northern Coastal Subarea City of Seaside and Cypress Pacific Wells
 (Data source: Watermaster)



2.3 Chloride Concentrations

2.3.1 Trends

Chemographs showing chloride concentrations over time are plotted for each of the monitoring wells shown on the Piper and Stiff diagrams and Sand City's Public Works Corp Yard production well. An example plot displaying chloride concentrations for the shallow PCA West Shallow monitoring well is shown on Figure 21. The complete set of chemographs is included in Appendix D. Chloride trends for most monitoring wells remain stable or fluctuate within a historical range. In Water Year 2020 there are two wells with increases that warrant mention. As described already in Section 2.2, monitoring well FO-09 Shallow has sustained increased chloride concentrations in both samples taken during Water Year 2020 (Appendix D: Figure D-9) above the almost consistently increasing concentrations since 2018. Another monitoring well FO-10 Shallow, located approximately one mile northeast of monitoring well FO-9 Shallow (Figure 10), experienced a 48 mg/L increase in chloride concentration since last year's 4th quarter sample (Appendix D: Figure D-11). The increases observed in both these monitoring wells are greater than fluctuations observed historically over the period of record. It is important to note that the elevated chloride concentrations in themselves do not indicate seawater intrusion; additional lines of evidence must be present to confirm incipient seawater intrusion.

A confirmation groundwater sample for monitoring well FO-10 Shallow was collected on November 10, 2020 with laboratory results expected within a month. MPWMD staff took a field electrical conductivity measurement during sampling that appeared to indicate a similar conductivity to the sample collected the previous month with a chloride concentration of 89.9 mg/L.

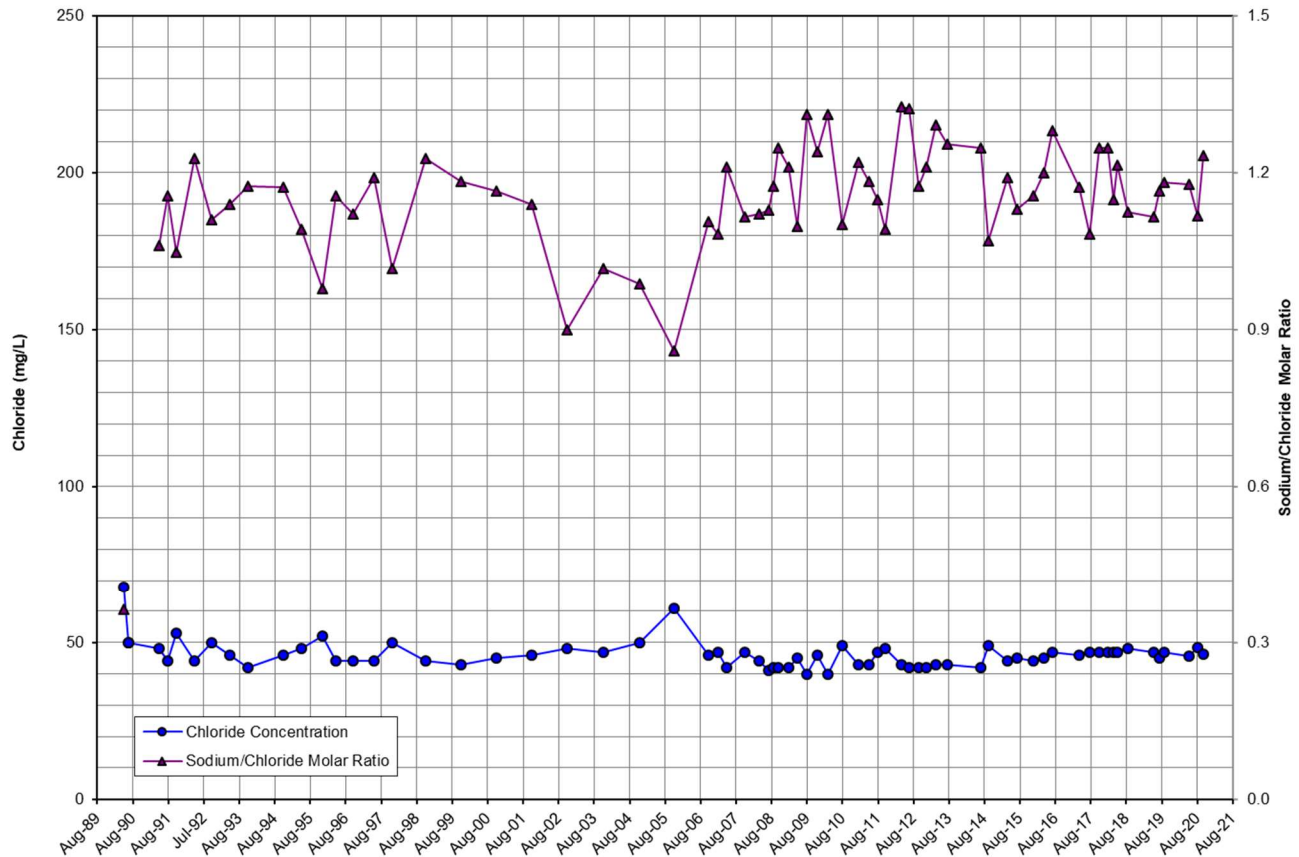


Figure 21. Historical Chloride and Sodium/Chloride Molar Ratios, PCA West Shallow

2.3.2 Chloride Concentration Maps

2.3.2.1 Fourth Quarter Water Year 2020 (July-September 2020)

Fourth quarter Water Year 2020 chloride concentrations are mapped using data from August and September 2020. The maps for the shallow and deep zones are included on Figure 22 and Figure 23, respectively.

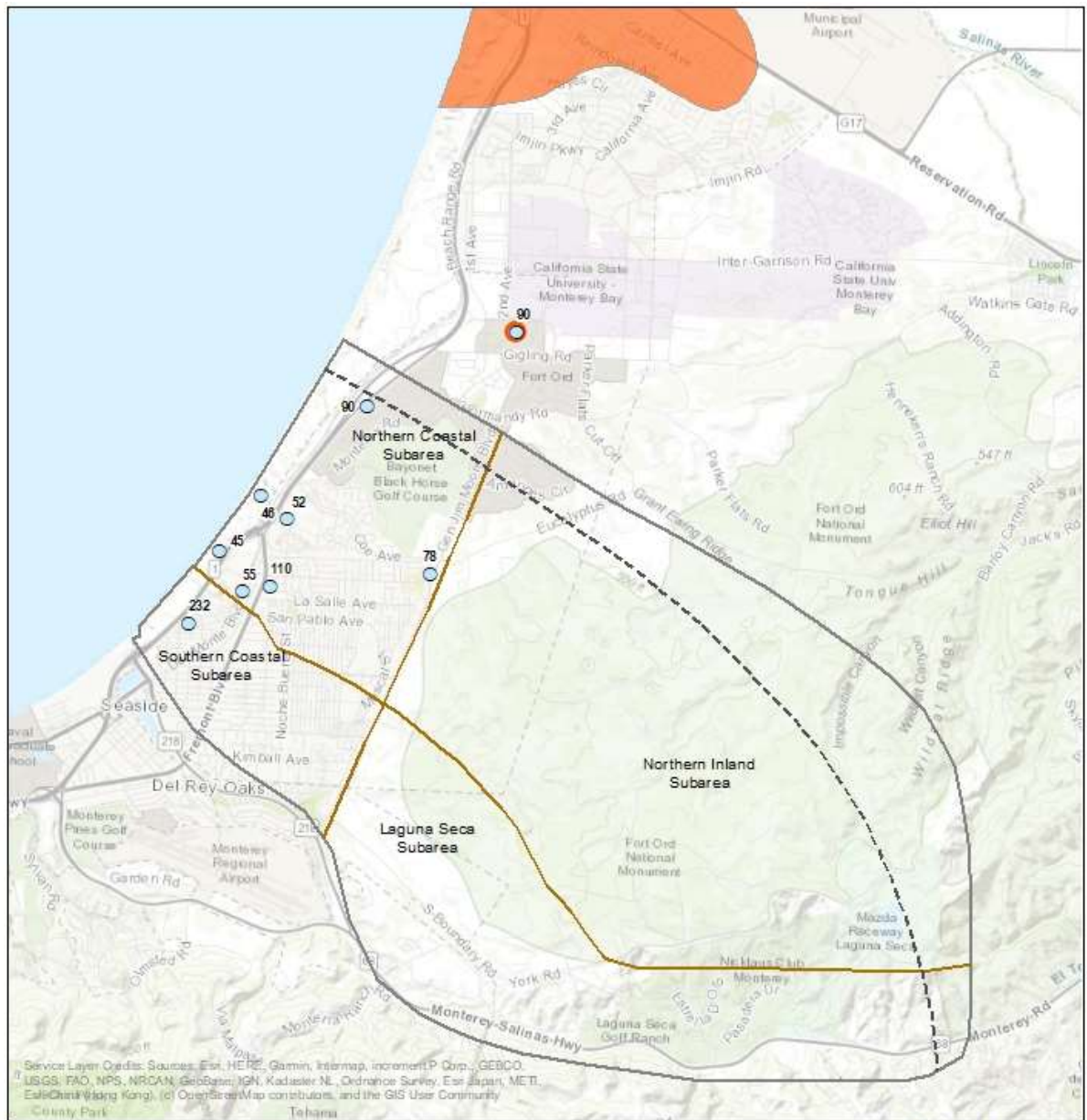
The shallow zone 4th quarter Water Year 2020 chloride concentration map is shown on Figure 22. Chloride data from shallow wells are posted on this map but do not show a spatial distribution that can be readily contoured because of large differences in concentrations in close proximity to each other. In general, the shallow chloride concentrations have not varied much from previous water years, with the exception of monitoring wells FO-9 Shallow and FO-10 Shallow which have had chloride concentration increases of 13 mg/L and 48 mg/L, respectively, since the end of last water year. The chemographs for these two monitoring wells showing chloride concentrations over time are in Appendix D: Figures D-9 and Figure D-11.



For data available in the shallow zone, chloride concentrations in the coastal northern portion of the Northern Coastal subarea and just north of the Seaside Basin now average around 90 mg/L because of the increase in FO-9 Shallow and FO-10 Shallow concentrations. The southern portion of the Northern Coastal subarea has chloride concentrations that average 50 mg/L. The more inland Northern Coastal subarea wells have slightly higher chloride concentrations that may be due to depositional mineralization differences in the Paso Robles Formation. Based on available data, it appears shallow aquifer chloride concentrations in the northern portion of the Northern Coastal subarea are increasing.

Sand City's Public Works Corp Yard well continues to be the only coastal well in the Southern Coastal subarea with measured chloride data with the highest concentration of all shallow coastal monitoring wells (Appendix D: Figure D-13). The Piper and Stiff diagrams and sodium/chloride molar ratio for the well continue to suggest that the source of high chloride is not seawater.

The deep zone 4th quarter Water Year 2020 chloride concentration map is shown on Figure 23. Chloride concentrations for the Sentinel Wells are not shown on this map anymore because it was found that their groundwater samples are not representative of the aquifer. Since the chloride data shows no discernible spatial distribution, with high concentrations in close proximity to low concentrations, the data cannot be readily contoured. Deep zone chloride concentrations near the coast range between 66 mg/L and 160 mg/L, and are similar to last year. The well that experienced a greater than 10 mg/L chloride increase over the water year is CAWC's Luzern #2 production well (circled red on Figure 23). Chloride in the well historically fluctuates between 120 and 160 mg/L, and thus the increase is within its historical range of concentrations.



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EXPLANATION

- 4th Quarter WY 2020 Chloride Concentration in mg/L
- Well with ≥ 20 mg/L Chloride increase from last year
- Approximate Shallow Aquifer Northern Boundary

- Adjudicated Seaside Groundwater Basin Boundary
- Basin Boundary
- Subarea Boundary
- >500 mg/L Chloride Areas - 400 ft Aquifer in Salinas Valley

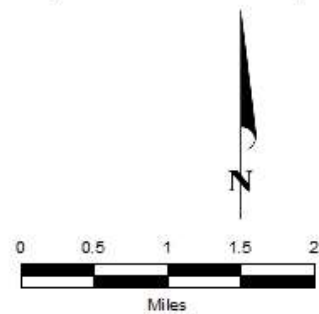
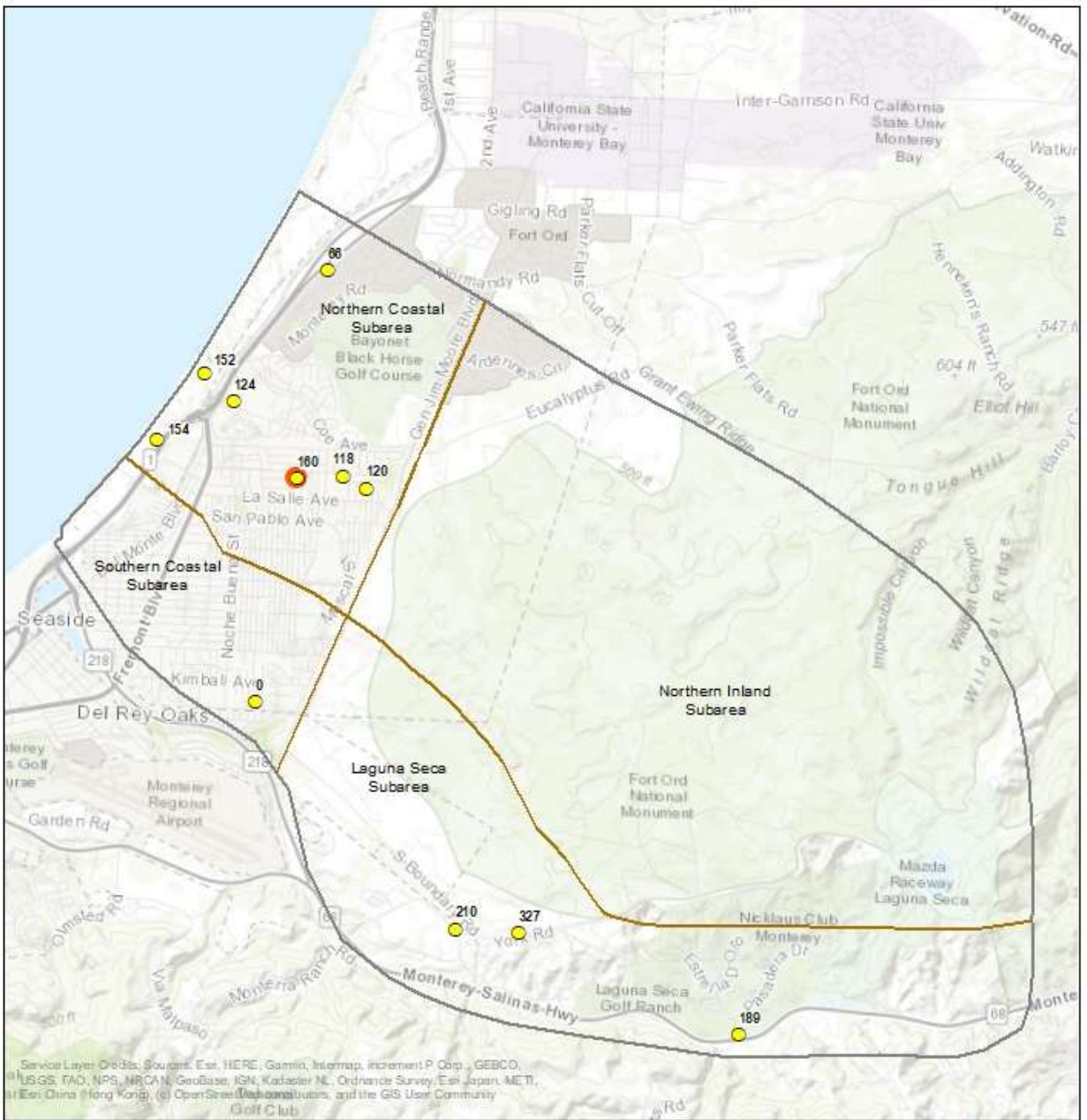


Figure 22. Shallow Zone Chloride Concentration Map – 4th Quarter WY 2020



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EXPLANATION

- 4th Quarter WY 2020 Chloride Concentration in mg/L
- Well with ≥ 20 mg/L Chloride increase from last year
- Adjudicated Seaside Groundwater Basin Boundary
- Basin Boundary
- Subarea Boundary

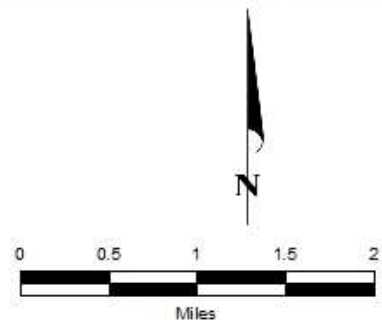


Figure 23. Deep Zone Chloride Concentration Map – 4th Quarter WY 2020



2.4 Sodium/Chloride Molar Ratios

Chemographs showing long-term sodium/chloride molar ratios over time are plotted for all 12 monitoring wells and one production well. Historical chemographs for monitoring wells that are not on the Water Year 2020 Piper and Stiff diagrams because they were not sampled, are also included for completeness. An example plot displaying sodium/chloride molar ratios for the shallow PCA West well is shown on Figure 21. The complete set of chemographs is included in Appendix D.

Most of the sodium/chloride molar ratios in the monitoring wells remained constant or increased over the past year. The sodium/chloride molar ratio at monitoring well FO-10 Shallow decreased slightly below its previous lowest ratio this water year (Appendix D: Figure D-9). The sample collected in September 2020 had a sodium/chloride ratio of 0.79 which is the lowest molar ratio of all groundwater sampled in the basin. Similarly, the most recent FO-09 Shallow sample also decreased to 0.82 this year, a value just above its previous lowest ratio of 0.81. Sodium/chloride ratios below 0.86 are significant because Jones et al. (1999) suggest that sodium/chloride ratios in advance of a seawater intrusion front will be below 0.86.

2.5 Electric Induction Logs

Two induction logging events took place in the four Sentinel Wells for Water Year 2020; October 2019 logging technically occurred in Water Year 2020 but the data were used for the Water Year 2019 SIAR. Pacific Surveys conducted the logging, and have done so since August 2014. The first logging event took place in March 2020, and the second in October 2020. The induction tool used during the past 10 logging events from 2014 – 2019 failed and was replaced with a new induction tool having a slightly different response curve. Feeney (2020) prepared a technical memorandum on the history of changing induction tools and concluded that although three different logging instruments have been Sentinel Wells, comparison of traces captured by the same instrument have shown no change in formation conductivity in the lower aquifer system. Pertinent summary points made in the technical memorandum include:

- Three different induction tools have been used during the project history, and while different tools show responses that are different in terms of absolute values, each tool had internally consistent “same-tool” responses.
- The new tool (Tool 3 LIM) shows repeatable responses.
- Moving forward, all data presentations will be referenced to the current tool, as was done in 2014 when the tool change previously occurred.



Feeney (2007) described the original 2007 baseline induction logs for each of the wells as follows:

“SBWM-1 — The upper 50 feet of this well shows very high conductivities. This signature is present in all of the wells and is the result of the 50-foot steel conductor casing. However, because the water table is below the conductor casing at all locations, the steel casing does not interfere with data collection within the saturated sediments below. Below the conductor casing in SBWM-1, the sediment materials are dry to a depth of approximately 115 feet. Below this depth, there is approximately 10 feet of sand containing fresh water. Below 125 feet and extending to approximately 350 – 400 feet is sand containing saline water with conductivities measuring as high as 10,000 mhos/cm. This saline water is contained within the Dune /Beach Sand Deposits and the Aromas Sand. Below this depth, conductivities are relatively low with the exception of the thick marine clay between approximately 600 -700 feet. The other conductive zones also correlate with clay zones.

SBWM-2 — As in SBWM-1 there is a thin layer of fresh water overlying a zone of saline water to approximately 130 feet within the Beach/Dune Sands and Aromas Sand. Below this depth, the materials become increasingly clayey, complicating the interpretation. Below this depth, there are no obvious zones of anomalous conductivity; that is, the zones that are more conductive correlate with clay zones.

SBWM-3 — In SBWM-3 saline water extends to a depth of approximately 100 feet within the Dune/Beach Sand and Aromas Deposits. Below 100 feet, the materials become clay and conductivities rapidly decline. Again, below the shallow saline water in the sand deposits, all zones of increased conductivity correlate with clay zones.

SBWM-4 — As with the other wells, the induction log reveals a thin layer of fresh water overlying saline water with the Dune Sands/Beach Deposits to a depth of approximately 100 feet. Below this depth the materials become clay and there are no additional zones of increased conductivity uncorrelated with clay zones.”

Salinity changes shown on Figure 24 through Figure 27 for Sentinel Wells 1 – 4, respectively, are only relative, and do not allow direct measurement of TDS or chloride concentrations in the aquifer. They do, however, provide a means to determine changes in salinity over time. Induction logging in previous years indicated salinity in the Dune Sands and Aromas Formation overlaying the main production aquifers fluctuates from season to season; becoming more saline in the fall months when stresses on the aquifer are greatest. The logging events that took place in Water Year 2020 plot extremely similarly on the figures below, suggesting very little net change in salinity over the course of the year. As has been the case historically, none of the wells show detectable changes in conductivity to the deeper aquifers where the majority of production wells extract groundwater.

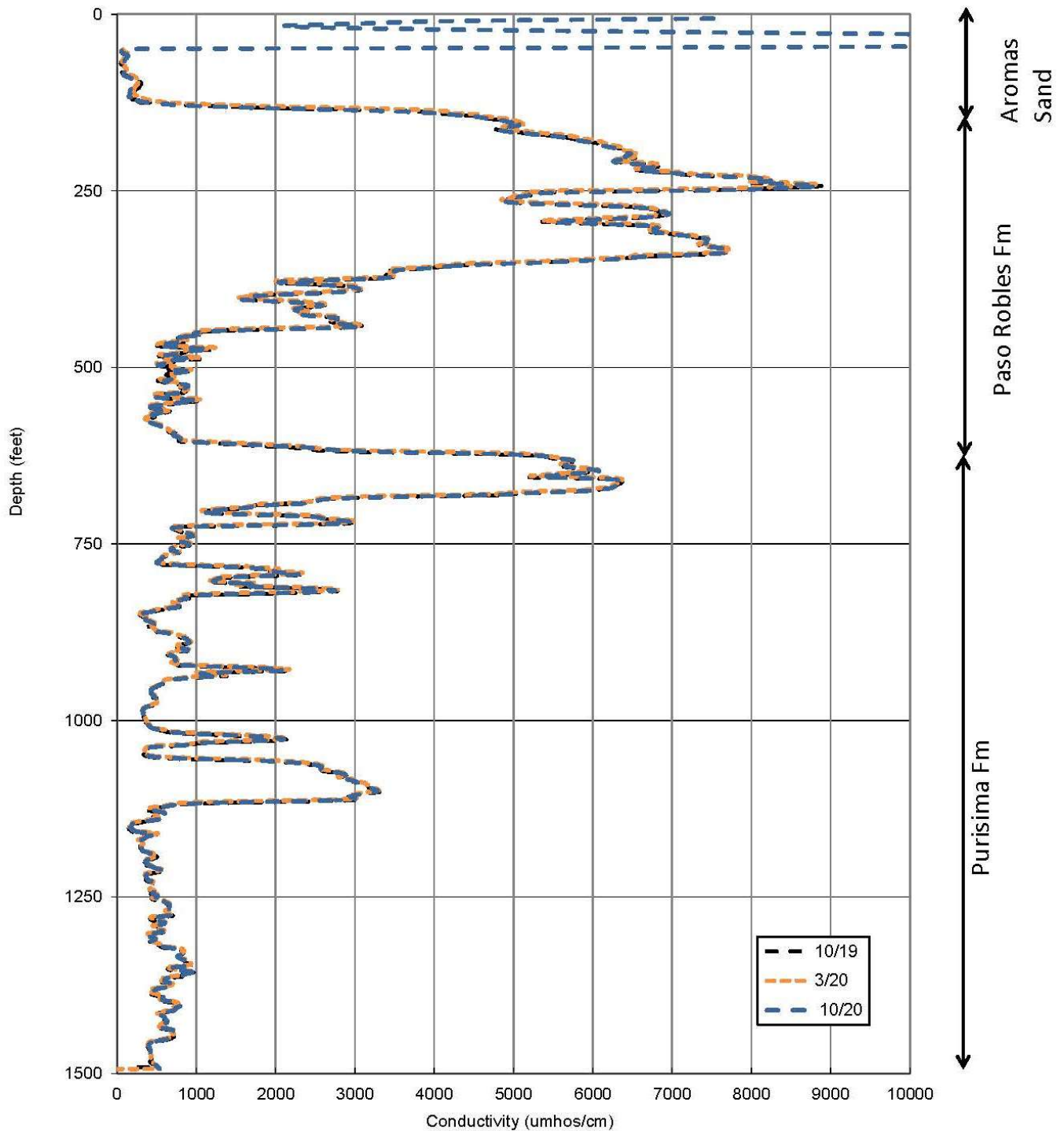


Figure 24. Sentinel Well SBWM MW-1 Induction Log

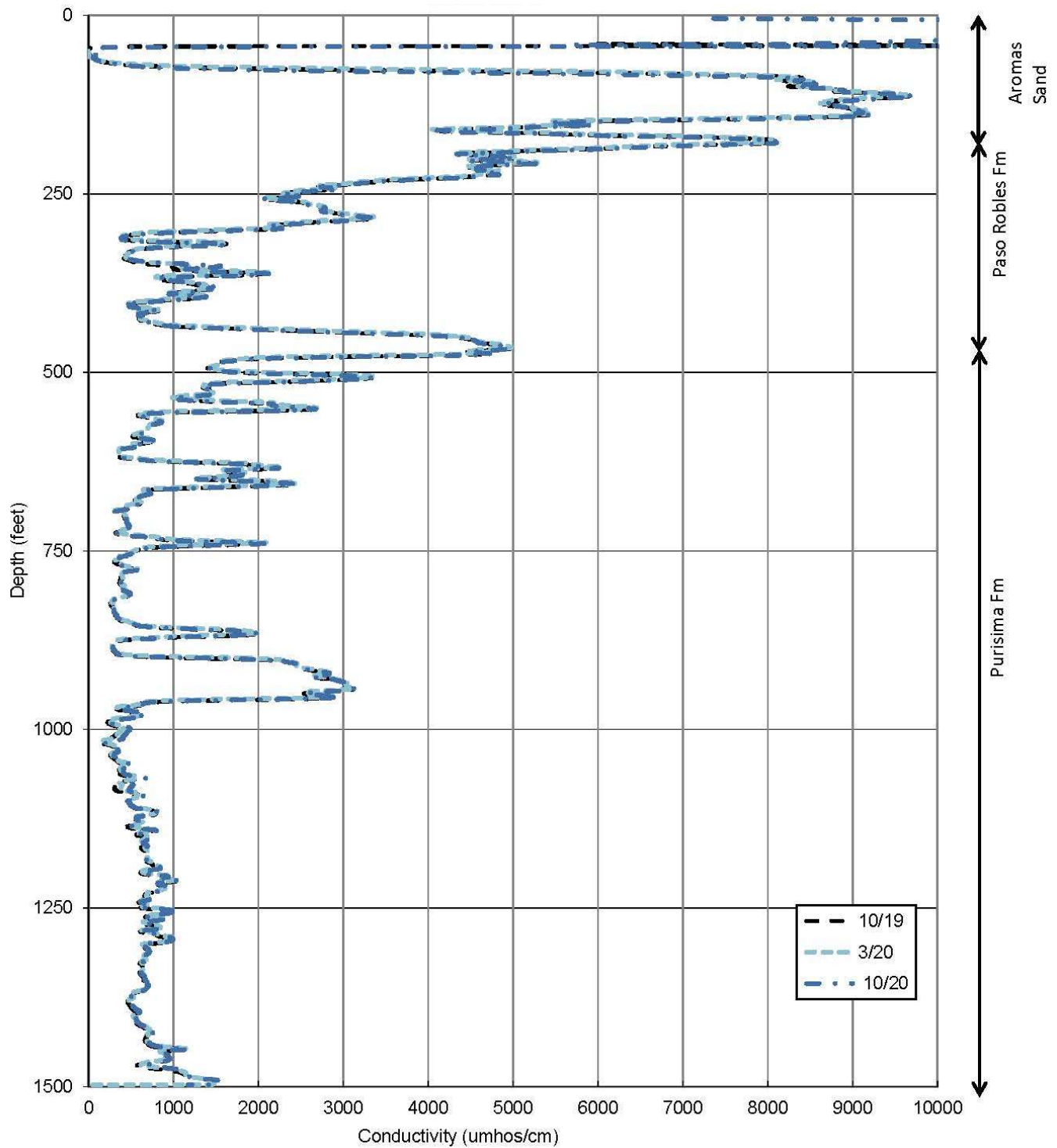


Figure 25. Sentinel Well SBWM MW-2 Induction Log

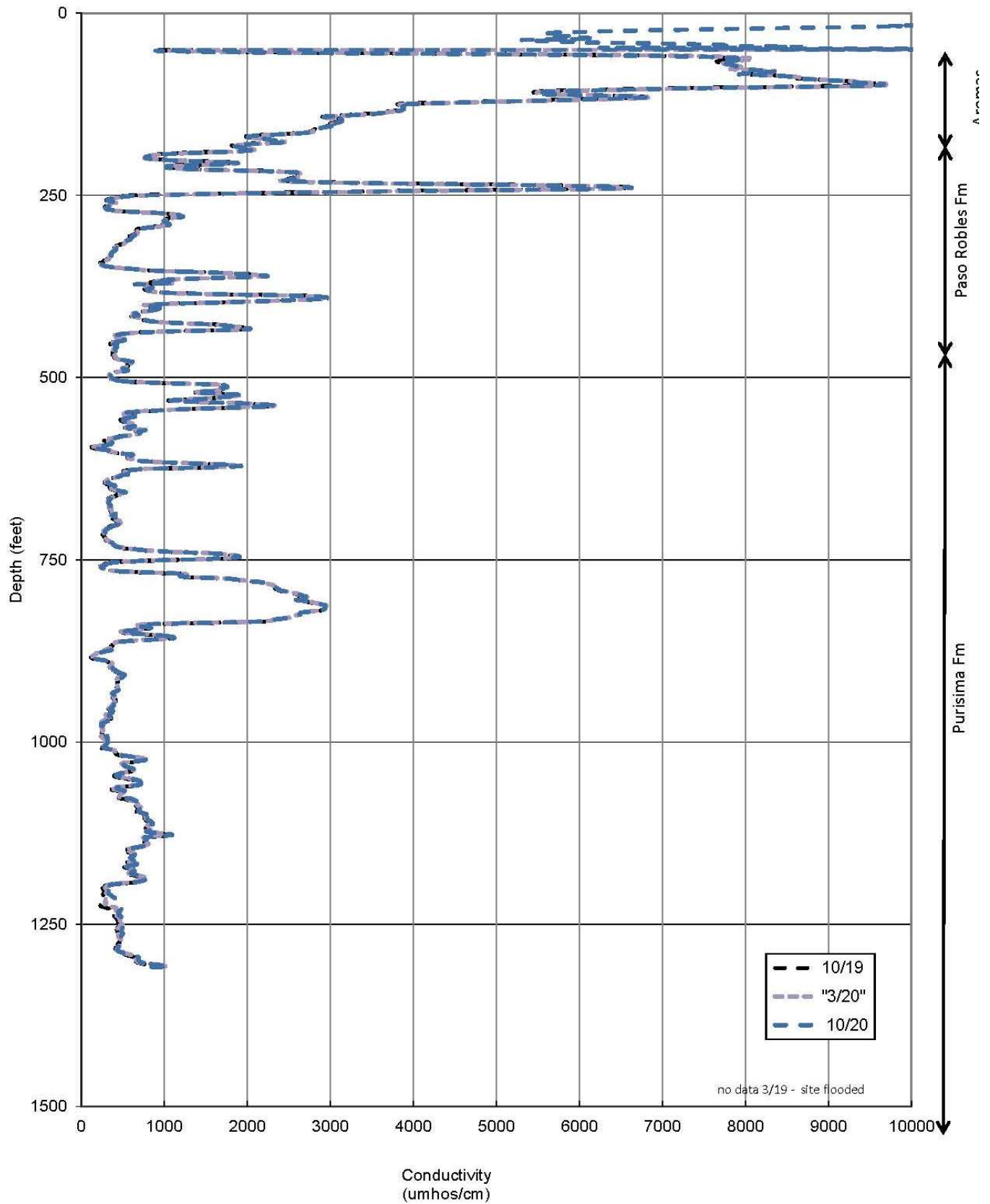


Figure 26. Sentinel Well SBWM MW-3 Induction Log

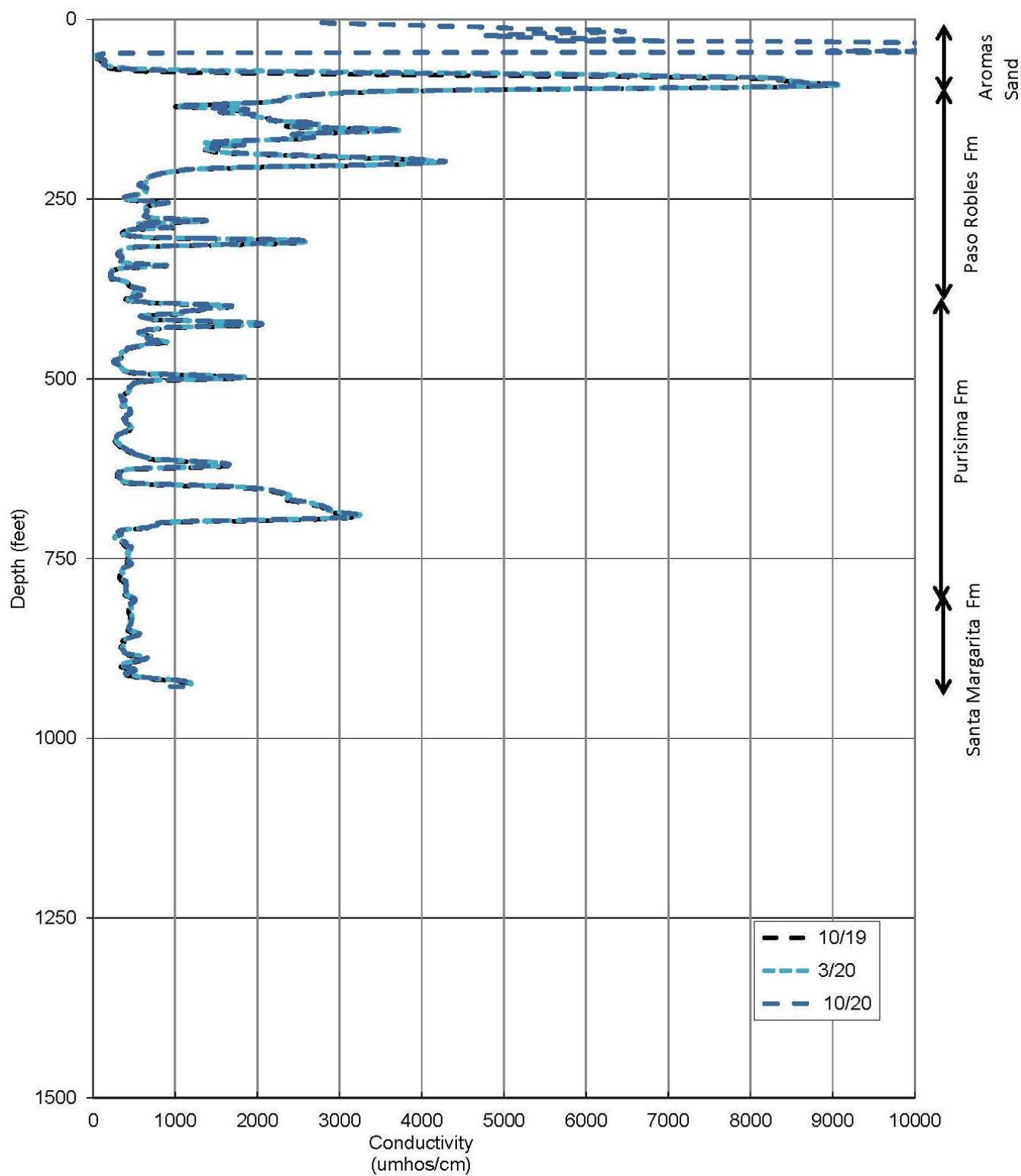


Figure 27. Sentinel Well SBWM MW-4 Induction Log



2.6 Groundwater Levels

Groundwater levels are not direct indicators of seawater intrusion, but indirectly suggest opportunities for seawater intrusion. Coastal groundwater levels at or near sea level are not sufficient to repel seawater intrusion, and will likely allow some amount of seawater intrusion unless groundwater levels increase. All groundwater level data collected in Water Year 2020 are included in Appendix B.

2.6.1 Groundwater Level Trends

2.6.1.1 Northern Coastal Subarea

Groundwater level data from the PCA-East well are representative of groundwater levels in the Northern Coastal subarea, west of nearby production wells. The hydrograph shows peaks and lows that are strongly influenced by pumping from the nearby California American Water Company (CAWC) production wells on groundwater levels in the deep zone and injection of Carmel River water at the eastern boundary of the subarea (Figure 28). Other influences such as tides which can cause up to a one-foot fluctuation in the deep completion of PCA-East are also recognized. Because of all the possible influences on groundwater levels, it is difficult to compare the present year to the previous year directly. What is more important is to look at the long-term trends.

PCA-East deep on Figure 28 shows an overall decline in groundwater levels until 2009, levels increase and then more or less stabilize over the next two years, and then from 2011 to 2016 experienced a continued decline. Groundwater levels recovered slightly in 2017 due to record rainfall. Groundwater levels have remained at a somewhat similar level since 2017, with no clear increasing or decreasing trend (Figure 28). The start of the overall decline in groundwater levels in the deep completion of PCA-East corresponds with the shift in CAWC's production from their shallow Paso Robles wells to deeper Santa Margarita wells.

Seasonal fluctuations are noticeable in the winter season when deep groundwater elevations are at their highest for the year. For Water Year 2017, the winter high in PCA-East deep increased to a level last seen in 1995, which is 17 feet higher than the lowest winter high level experienced during the 2012-2015 drought. This is because 2,345 acre-feet of excess Carmel River water was injected as it was a very wet year. A volume of 894.9 acre-feet was injected in Water Year 2020 (combined excess Carmel River Water and Pure Water Monterey purified recycled water) and thus the seasonal high in Water Year 2020 is slightly higher than 2019, when 744.4 acre-feet was injected (Figure 28).

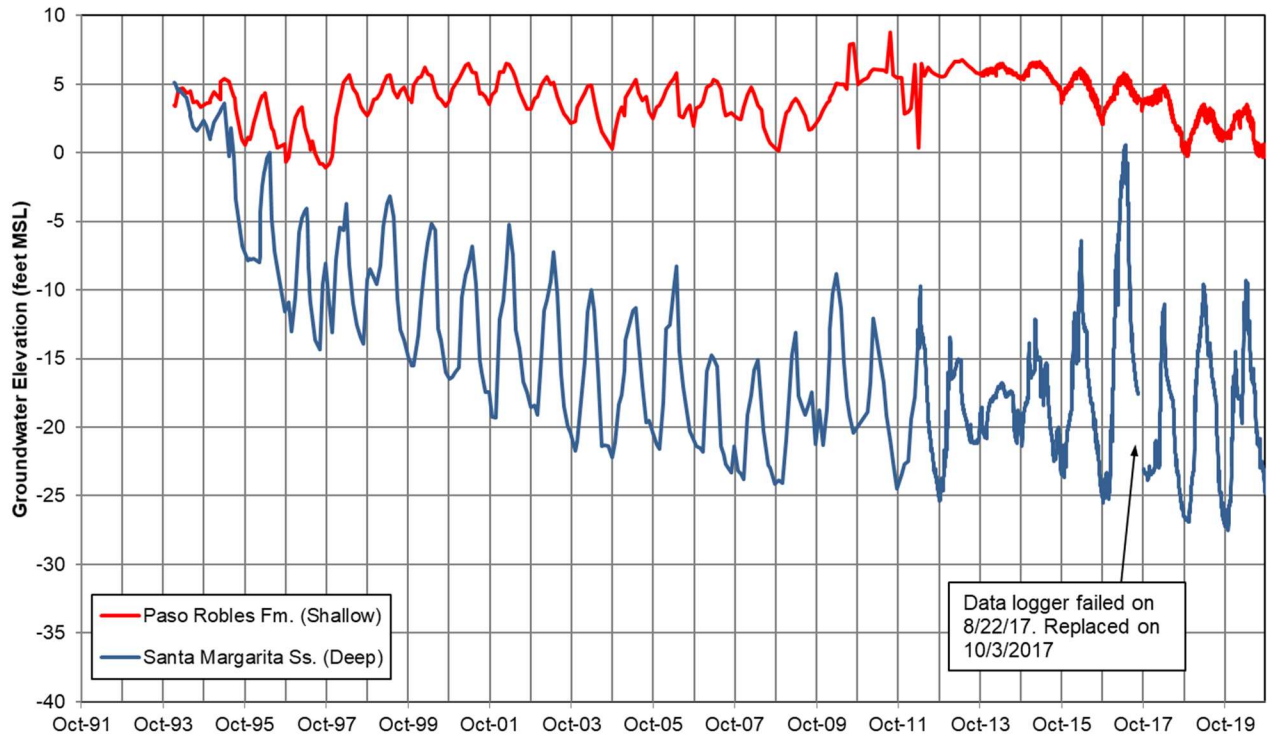


Figure 28. PCA-East Deep and Shallow Monitoring Well Hydrograph (Source: Watermaster)

It is important to note that the Santa Margarita Sandstone has limited connection to the ocean and is highly confined by the layers above it. This means that the amount of recharge entering the Santa Margarita Sandstone is limited and is therefore always susceptible to depletion if more water is pumped than is being recharged.

Figure 29 includes hydrographs of groundwater elevations for the four deep coastal Sentinel Wells. Groundwater elevations on this chart are collected using data loggers in each well that record levels every 30 minutes. The hydrographs plot daily average elevations, thereby smoothing out the more detailed data which are affected by tidal variations. The hydrographs for the Sentinel Wells are similar to the PCA-East deep hydrograph and show that groundwater elevations over winter and spring were the highest in Water Year 2017 because of increased injection. Groundwater levels in Water Year 2020 are similar to 2019 levels and there is no clear increasing or decreasing trend since 2015.

The hydrograph of shallow groundwater levels in PCA-East shows a declining trend since Water Year 2014, where levels have dropped about five feet over the past six years (Figure 28). The decline in shallow groundwater levels and greater seasonal fluctuations corresponds with the recommencement of pumping at the Coe Ave and Black Horse Bayonet golf course irrigation wells after being supplied water by Marina Coast Water District from Water Year 2009 through 2014/2015. Since Water Year 2018, groundwater levels are below protective elevations at this



coastal monitoring well as described further in Section 2.6.3. Seasonal level increases in the shallow aquifer are usually related to reduced wintertime production, and increased pumping during summer. Although the shallow seasonal fluctuations correspond with deep zone fluctuations, it is because seasonal pumping occurs in both aquifers, and not because the aquifers are closely connected.

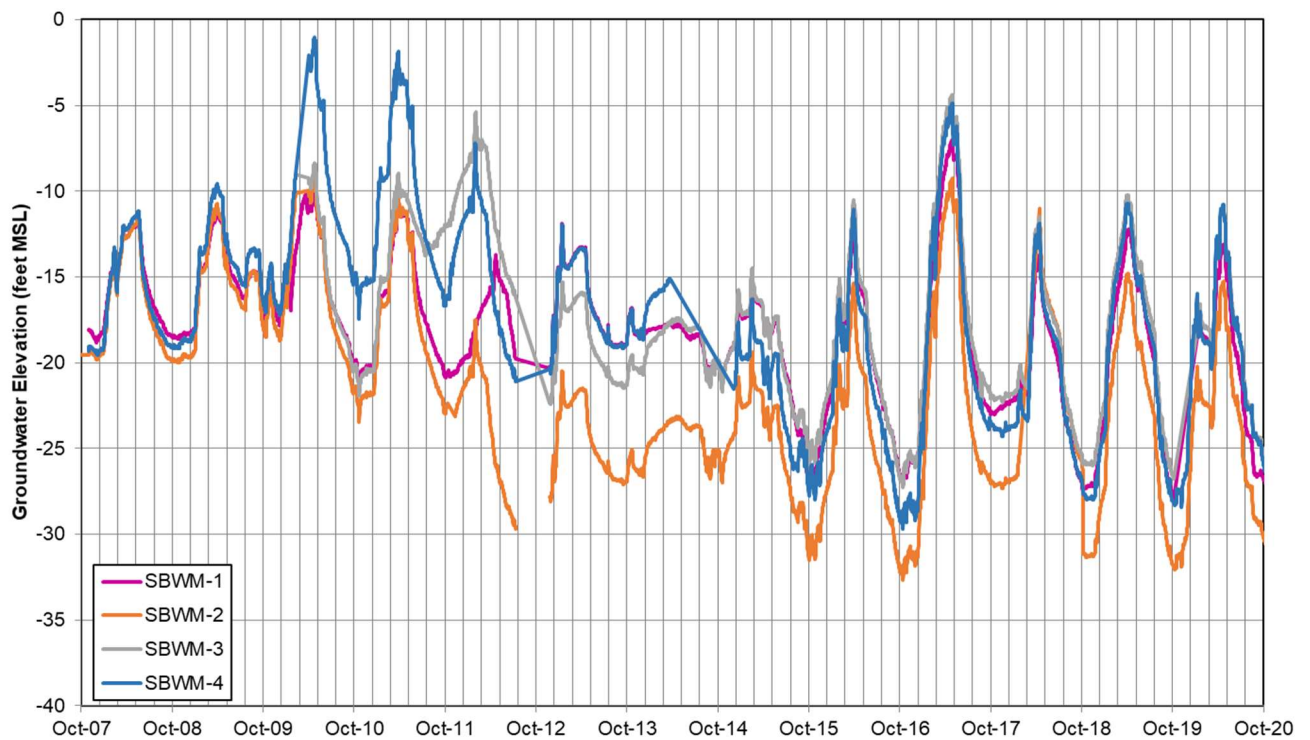


Figure 29. Sentinel Well Hydrographs (Source: Watermaster)



2.6.1.2 Southern Coastal Subarea

In the Southern Coastal subarea, the KMART monitoring well is representative of groundwater levels near the coast (Figure 30). The hydrograph shows that groundwater elevations have remained above sea level and continue to be fairly stable over time. The groundwater level in the KMART monitoring wells was only measured in November 2019 during Water Year 2020 due to COVID safety concerns from a nearby homeless encampment.

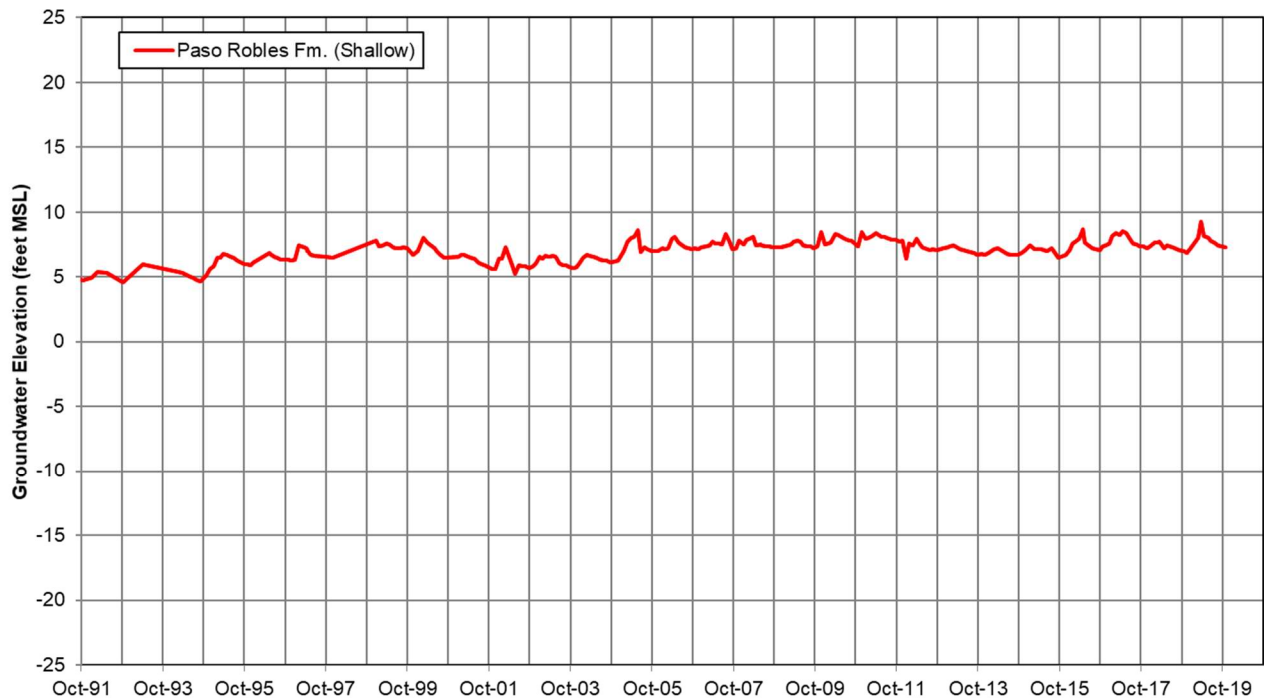


Figure 30. K-Mart Well Hydrograph (Source: Watermaster)

2.6.1.3 Laguna Seca Subarea

Although wells in the Laguna Seca subarea are far enough from the coast not to cause seawater intrusion, there is concern that since 2001 this area has experienced ongoing groundwater level declines that is not being halted or improved upon by triennial pumping reductions. It is believed this is occurring due in part to the Natural Safe Yield of the subarea being too high and in part due to influences of groundwater pumping east of the Seaside Basin boundary (HydroMetrics WRI, 2016). Figure 31 shows in the eastern portion of the subarea that between 1999 and 2014, shallow groundwater levels declined at a rate of approximately 0.6 feet per year, and deep groundwater levels declined up to 4 feet per year. Although there was some stabilization in groundwater levels between Water Years 2014 and 2016, groundwater levels continue to decline at a rate of less than 0.6 feet per year, including in Water Year 2020. Figure 10 shows the location of wells with hydrographs on Figure 31 while Figure 32 shows the location of all wells, including production wells in the eastern Laguna Seca subarea.

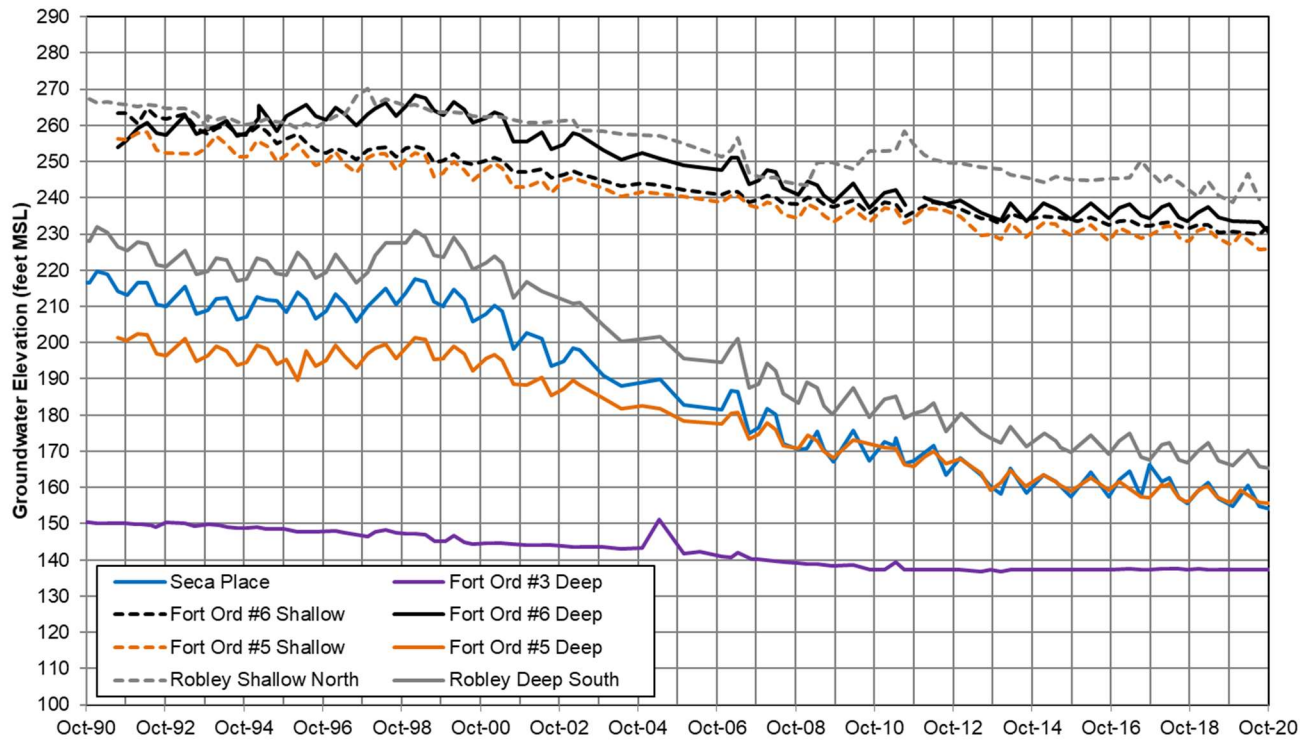
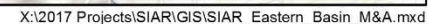


Figure 31. Eastern Laguna Seca Subarea Hydrographs

Groundwater levels in the Ryan Ranch area have continued to decline slightly in response to the resumption of CAWC pumping at Ryan Ranch #7 in June 2019. Groundwater levels are currently at roughly the same elevations they were before Ryan Ranch #7 was taken offline in February 2018.



EXPLANATION

- Adjudicated Seaside Groundwater Basin
- Basin Boundary
 - Subarea Boundary
 - Select Monitoring Wells
- Production Wells
- Well Screened Interval Entirely Within Paso Robles Aquifer (Shallow)
 - Well Screened Interval Includes Santa Margarita Aquifer (Deep)

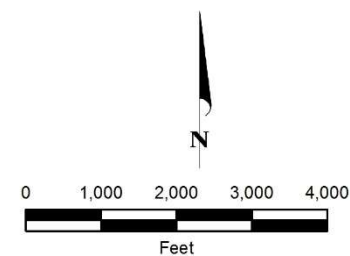


Figure 32. Eastern Laguna Seca Subarea Wells



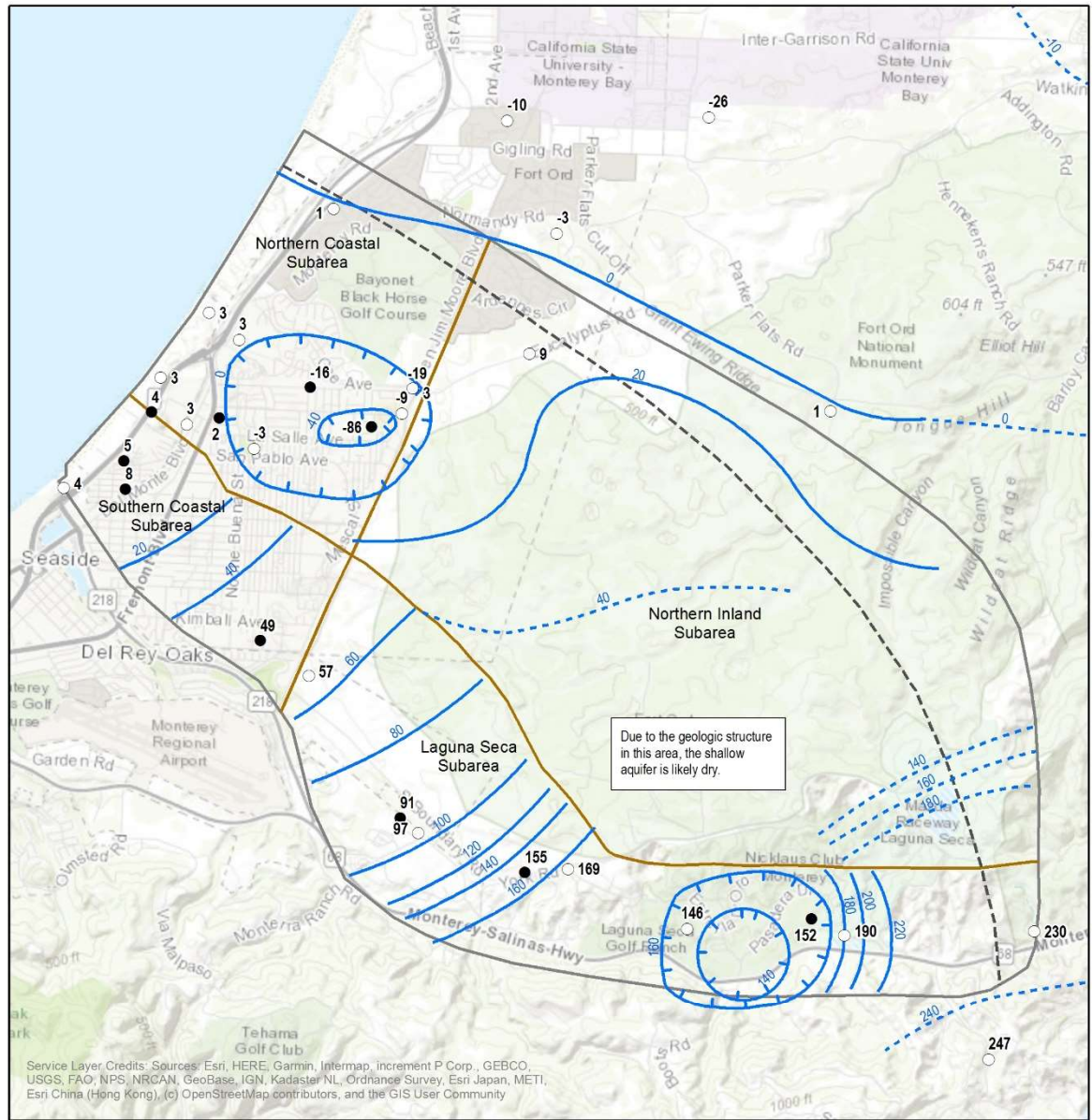
2.6.2 Groundwater Elevation Maps

2.6.2.1 Second Quarter Water Year 2020 (January-March 2020)

Groundwater level maps for the shallow and deep aquifer zones for the 2nd quarter of Water Year 2020 are shown on Figure 33 and Figure 34, respectively.

Other than in areas of active groundwater pumping, the shallow aquifer does not show seasonal fluctuations to the same extent as the deep aquifer. The following are observations on the 2nd quarter groundwater elevation contours for the shallow aquifer (Figure 33):

- In the Northern Coastal subarea and just north of the subarea (outside of the basin), 2nd quarter (spring) shallow groundwater elevations declined around 1 foot from 2nd quarter of Water Year 2019 levels.
- The shallow aquifer 2nd quarter pumping depression in the Northern Coastal subarea remained of similar size in Water Year 2020 compared to last year.
- The Southern Coastal subarea continues to have stable groundwater levels.
- Groundwater levels in the western portion of the subarea at Ryan Ranch continue to fall in response to the resumption of pumping at Ryan Ranch 7.
- The pumping depression caused by the Laguna Seca Golf Ranch wells in the central Laguna Seca subarea remains similar in size to recent years.
- Spring levels in the eastern Laguna Seca subarea are similar to last year at the same time.
- In the eastern portion of the Northern Inland subarea, an area of the shallow aquifer is indicated to be potentially dry due to geologic structural control.



EXPLANATION

Wells with Water-Level Data (2nd Quarter WY 2020, Shallow Zone)

- Monitoring Well
- Production Well

WY 2020 Shallow Zone Groundwater Elevation (feet MSL)

- Groundwater Elevation
- Pumping Depression
- Dashed where uncertain (no well data)

--- Shallow Aquifer Northern Boundary

Adjudicated Seaside Groundwater Basin Boundary

— Basin Boundary

— Subarea Boundary

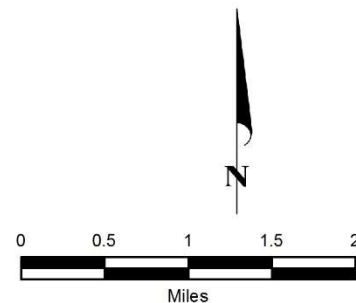
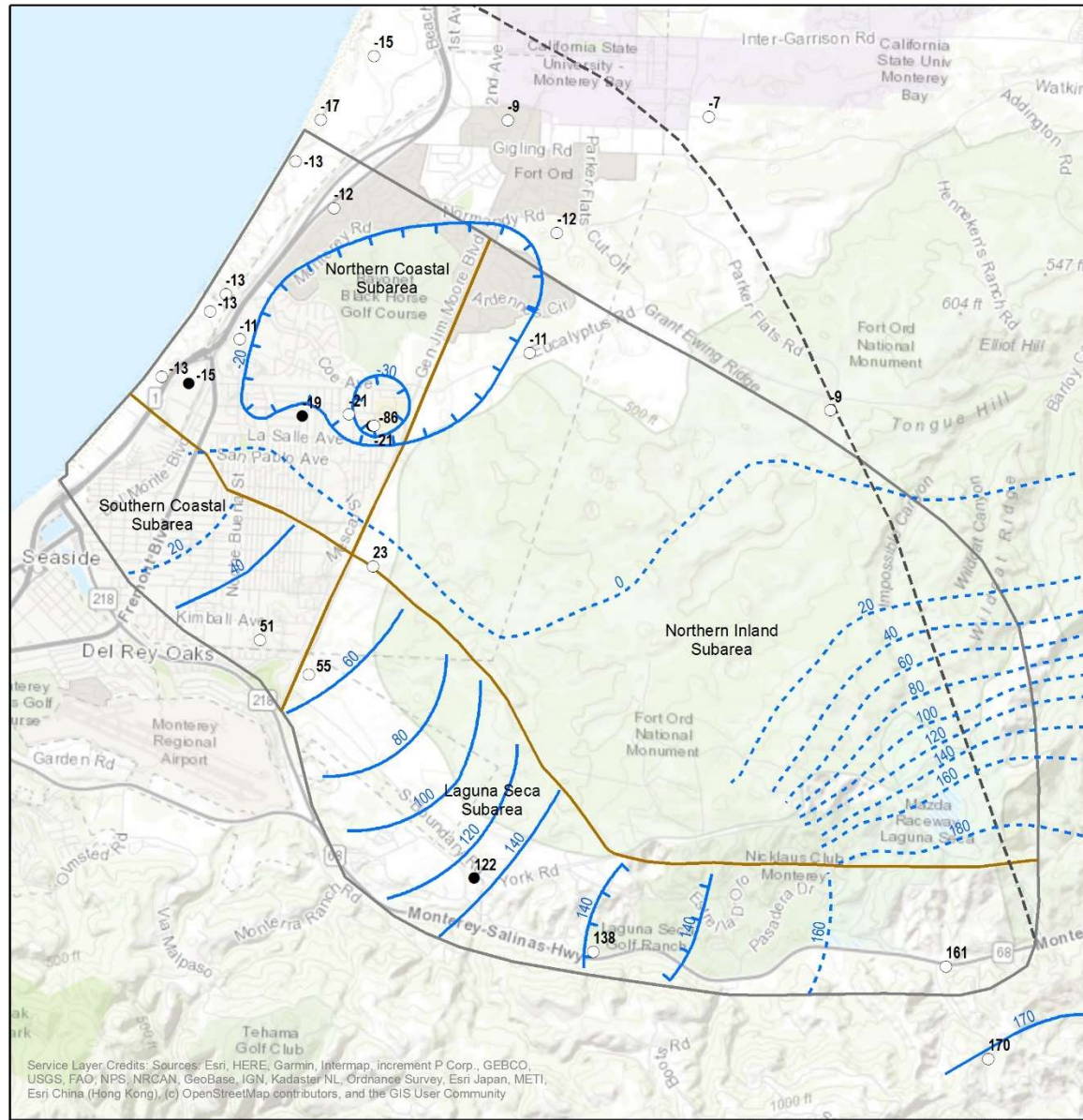


Figure 33. Shallow Zone Water Elevation Map – 2nd Quarter WY 2020 (January-March 2020)



In the deep aquifer, 2nd quarter (spring) groundwater levels particularly along the coast are usually higher than 4th quarter (fall) groundwater levels by up to 6 to 7 feet due to seasonal groundwater demand. The following are observations on the 2nd quarter groundwater elevation contours for the deep aquifer (Figure 34):

- In the very north of the Northern Coastal subarea and just north of the subarea, deep groundwater levels have increased about one foot along the coast.
- Within the central and southern portion of the Northern Coastal subarea, groundwater levels decreased one to two feet along the coast.
- The deep pumping depression in the Northern Coastal subarea expanded slightly westwards since Water Year 2019.
- The pumping depression associated with pumping at the Laguna Seca golf courses is similar to the 2nd quarter of last year.
- The eastern portion of the Laguna Seca subarea has groundwater levels similar to last year.



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EXPLANATION

Wells with Water-Level Data (2nd Quarter WY 2020, Deep Zone)

○ Monitoring Well

● Production Well

WY 2020 Deep Zone Groundwater Elevation (feet MSL)

— Groundwater Elevation

— Pumping Depression

--- Dashed where uncertain (no well data)

--- Deep Aquifer Northern Boundary

Adjudicated Seaside Groundwater Basin Boundary

— Basin Boundary

— Subarea Boundary

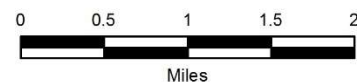


Figure 34. Deep Zone Water Elevation Map – 2nd Quarter WY 2020 (January-March 2020)

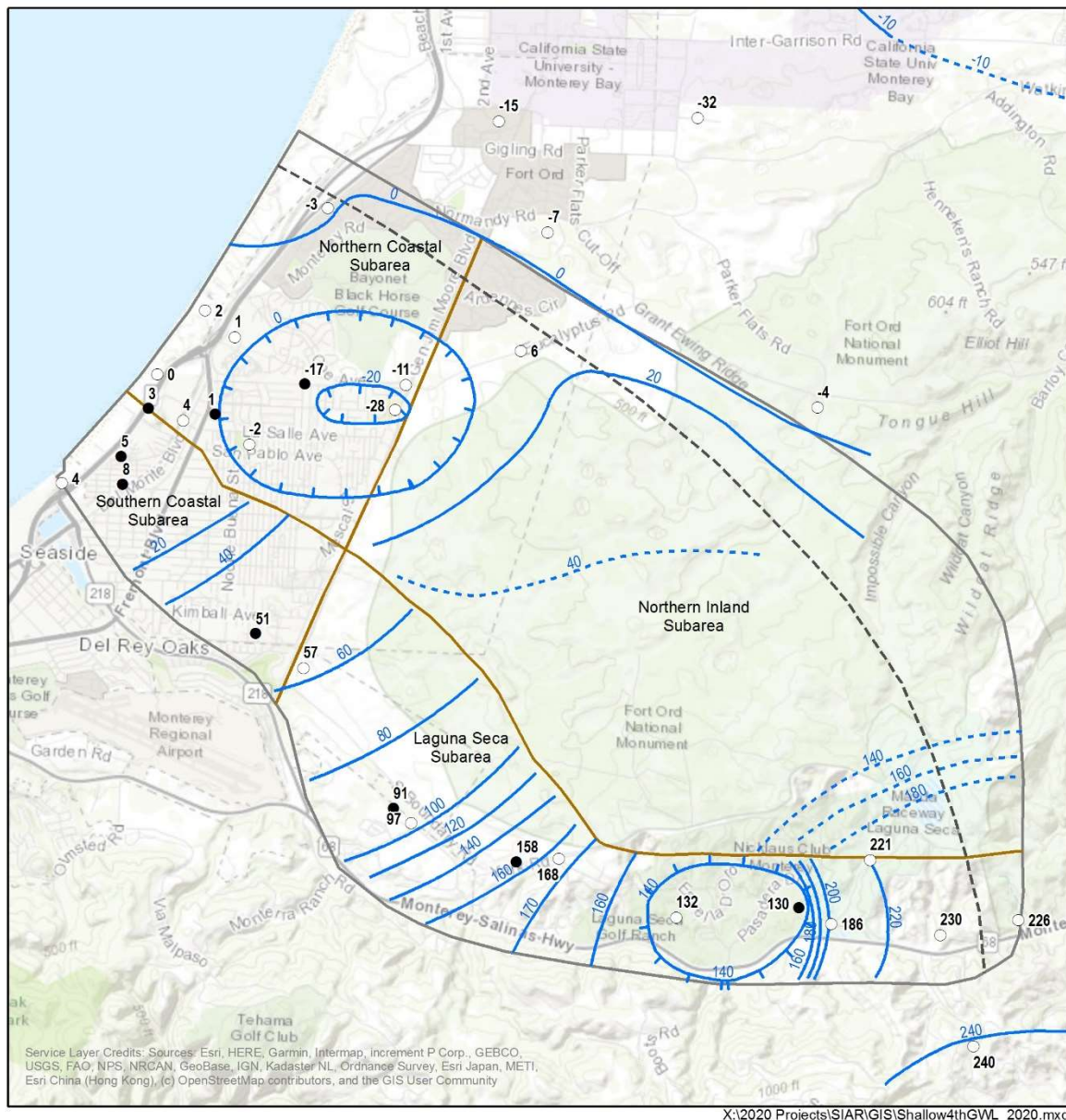


2.6.2.2 Fourth Quarter Water Year 2020 (July-September 2020)

Groundwater elevation maps for the shallow and deep aquifer zones for the 4th quarter of Water Year 2020 are shown on Figure 35 and Figure 36, respectively.

The following are observations on the 4th quarter groundwater elevation contours for the shallow aquifer (Figure 35):

- North of the Northern Coastal subarea (outside of the basin), groundwater elevations dropped between two and seven feet. As a result, the sea level contour moved southwards and now runs roughly along the northern adjudicated boundary of the basin.
- Northern Coastal subarea groundwater elevations along the coast decreased up to two feet from the 4th quarter of Water Year 2019.
- The Northern Coastal subarea pumping depression is slightly smaller in the shallow aquifer because of approximately 800 acre-feet less CAWC pumping (combined shallow and deep aquifer pumping) in the subarea.
- Southern Coastal subarea groundwater levels are stable.
- The eastern portion of the Laguna Seca subarea has experienced a drop in groundwater levels of about 2 to 5 feet over the past year.



EXPLANATION

Wells with Water-Level Data (4th Quarter WY 2020, Shallow Zone)

- Monitoring Well
- Production Well

WY 2020 Shallow Zone Groundwater Elevation (feet MSL)

- Groundwater Elevation
- - - Pumping Depression

- - - Dashed where uncertain (no well data)

- - - Shallow Aquifer Northern Boundary

Adjudicated Seaside Groundwater Basin Boundary

— Basin Boundary

— Subarea Boundary

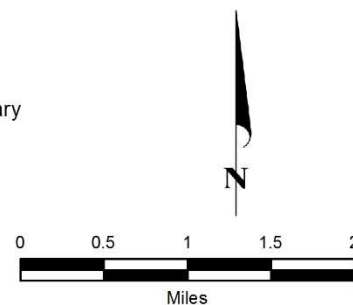
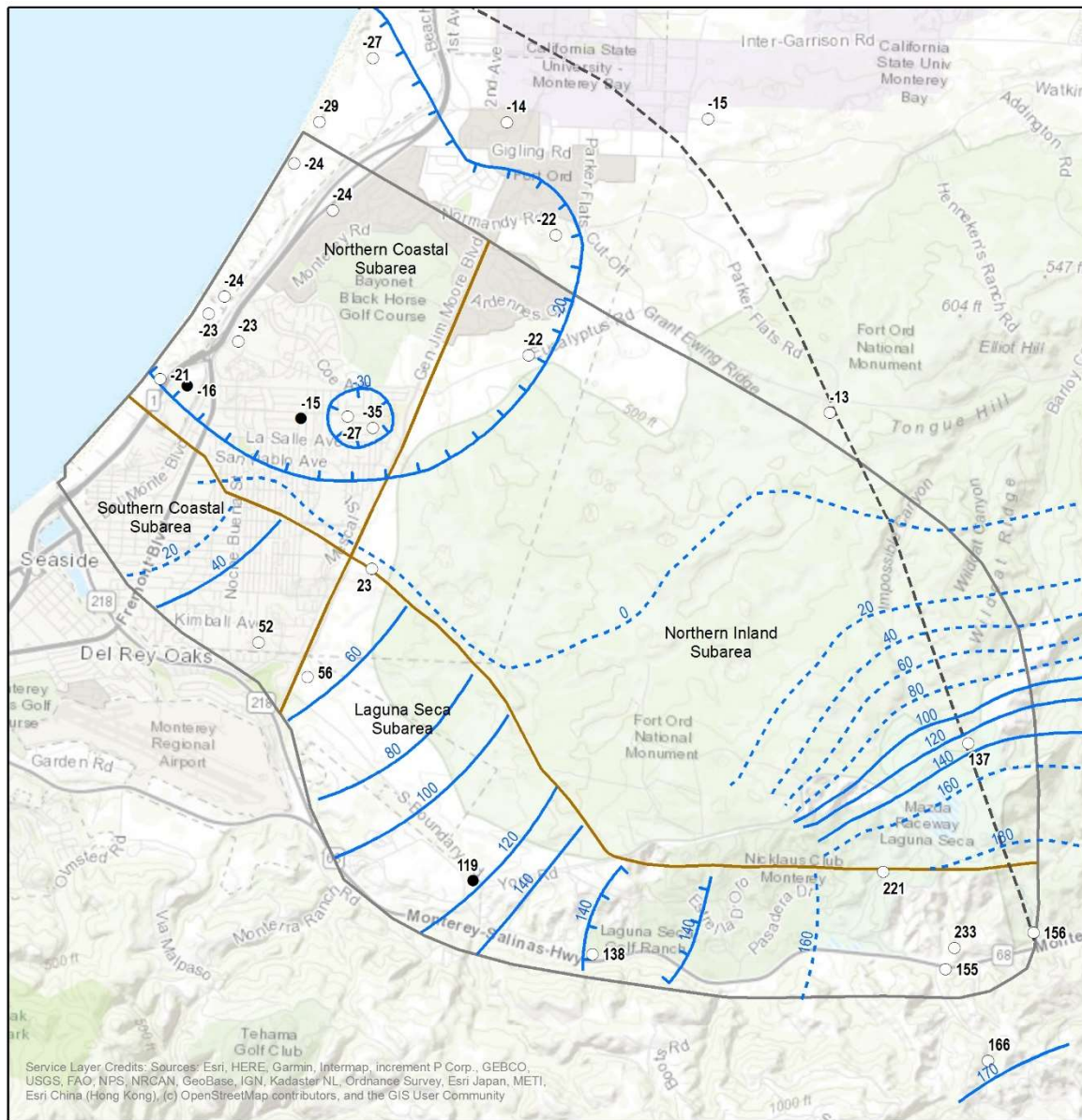


Figure 35. Shallow Zone Water Elevation Map – 4th Quarter WY 2020 (August/September 2020)



The following are observations on the 4th quarter groundwater elevation contours for the deep aquifer (Figure 36):

- North of Northern Coastal subarea, between 1 to 7 foot decline in groundwater levels. The groundwater levels controlling the location of the northern -20-foot contour remain similar to the same time last year.
- At the coast, deep groundwater levels in the Northern Coastal subarea remained the similar to last year.
- The Northern Coastal subarea deep aquifer's -20 foot elevation pumping depression is smaller in extent than last year because of approximately 800 acre-feet less CAWC pumping in the subarea.
- Groundwater levels in the area of the eastern Laguna Seca subarea at its boundary with the Corral de Tierra declined 3 to 4 feet since last year.



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EXPLANATION

Wells with Water-Level Data (4th Quarter WY 2020, Deep Zone)

- Monitoring Well
- Production Well

WY 2020 Deep Zone Groundwater Elevation (feet MSL)

- Groundwater Elevation
- - - Pumping Depression
- - - Dashed where uncertain (no to limited well data)
- - - Deep Aquifer Northern

Adjudicated Seaside Groundwater Basin Boundary

- Basin Boundary
- Subarea Boundary

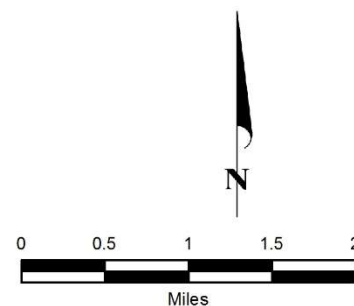


Figure 36. Deep Zone Water Elevation Map – 4th Quarter WY 2020 (August/September 2020)



2.6.3 Protective Groundwater Elevations

Protective groundwater elevations were determined in 2009 using the Seaside Groundwater Basin groundwater flow model and cross-sectional modeling (HydroMetrics LLC, 2009b). A subsequent study in 2013 to revisit and update the protective groundwater elevations concluded that the calibrated parameters in the basin wide model do not indicate that protective elevations should be lowered (HydroMetrics WRI, 2013b). Protective elevations for both the deep and shallow aquifers were established for monitoring well pairs with both a shallow and deep completion. Protective elevations for the six wells with protective elevations are shown in Table 1. Groundwater levels below protective elevations have a greater potential to cause seawater intrusion that will impact production wells.

Table 1. Summary of Protective Elevations at Coastal Monitoring Wells

Subarea	Well	Completion	Protective Elevation, Feet above sea level	Currently Above or Below Protective Elevations
Northern Coastal	MSC	Deep	17	below
		Shallow	11	below
	PCA-W	Deep	17	below
		Shallow	2	below
	Sentinel Well 3	Deep	4	below
Southern Coastal	CDM-MW4	Shallow	2	above

Figure 37 through Figure 40 show the historical groundwater elevations at each of the target protective elevation monitoring wells. Groundwater levels continue to be below protective elevations in all deep target monitoring wells (MSC deep, PCA-West deep, and Sentinel Well 3). Monitoring well CDM-MW4 is the only one of the three shallow wells with its groundwater level above its protective elevation. In Water Year 2020, the PCA West shallow well groundwater levels again fell below protective elevations. The greater seasonal fluctuations in this well are likely due to pumping from the shallow aquifer at the Coe Ave well. Groundwater levels in the MSC shallow well continue to be below its protective elevation.

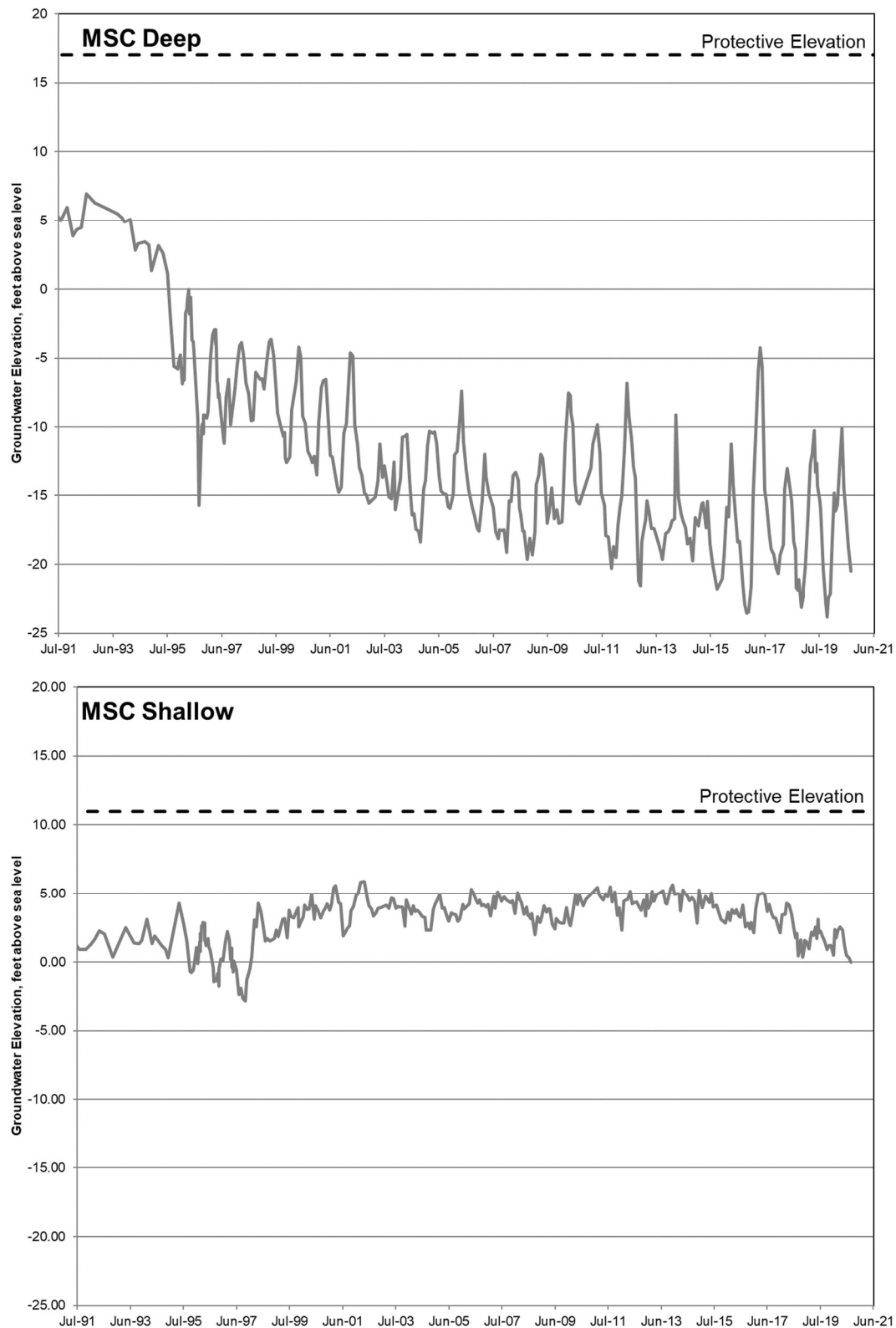


Figure 37. MSC Deep and Shallow Groundwater and Protective Elevations

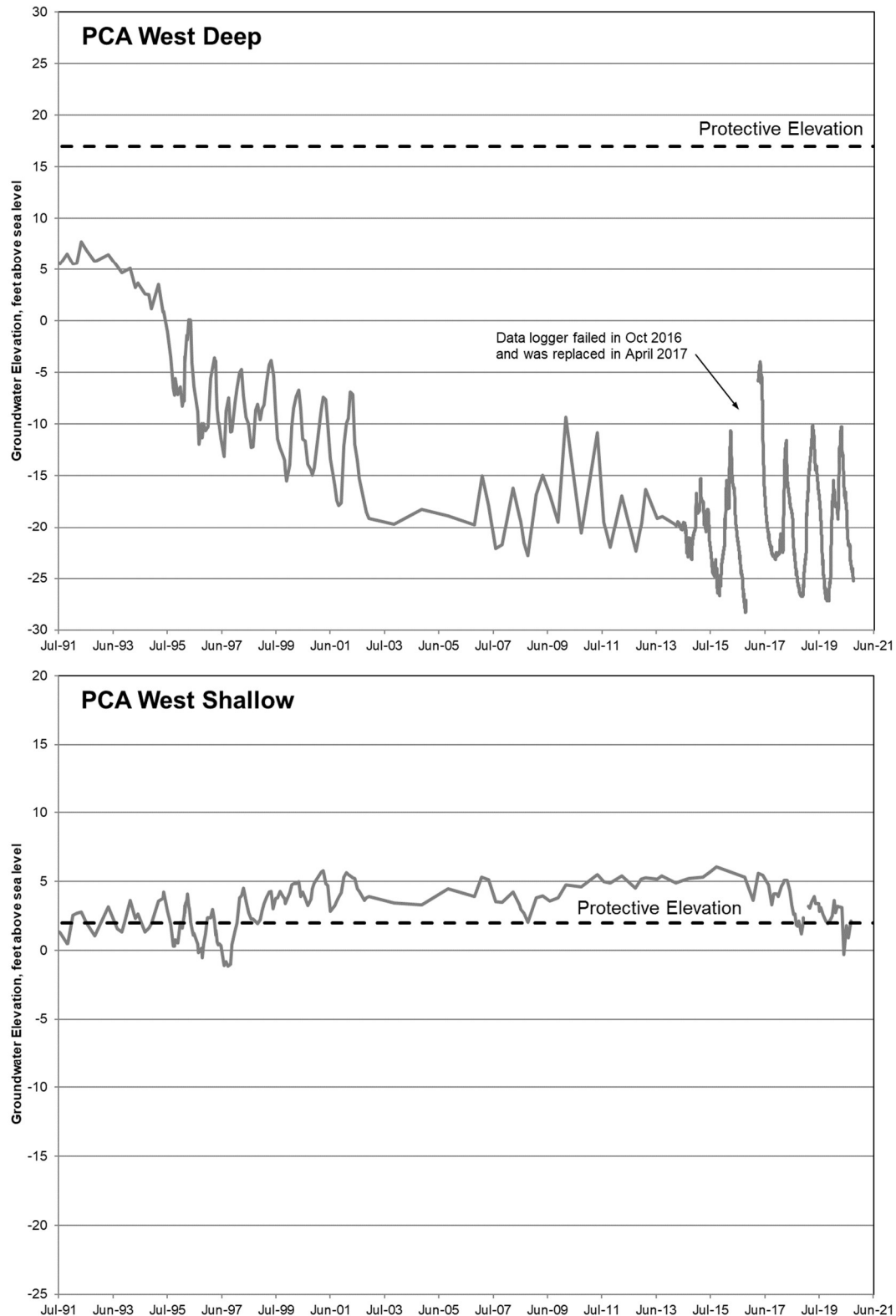


Figure 38. PCA West Deep and Shallow Groundwater and Protective Elevations

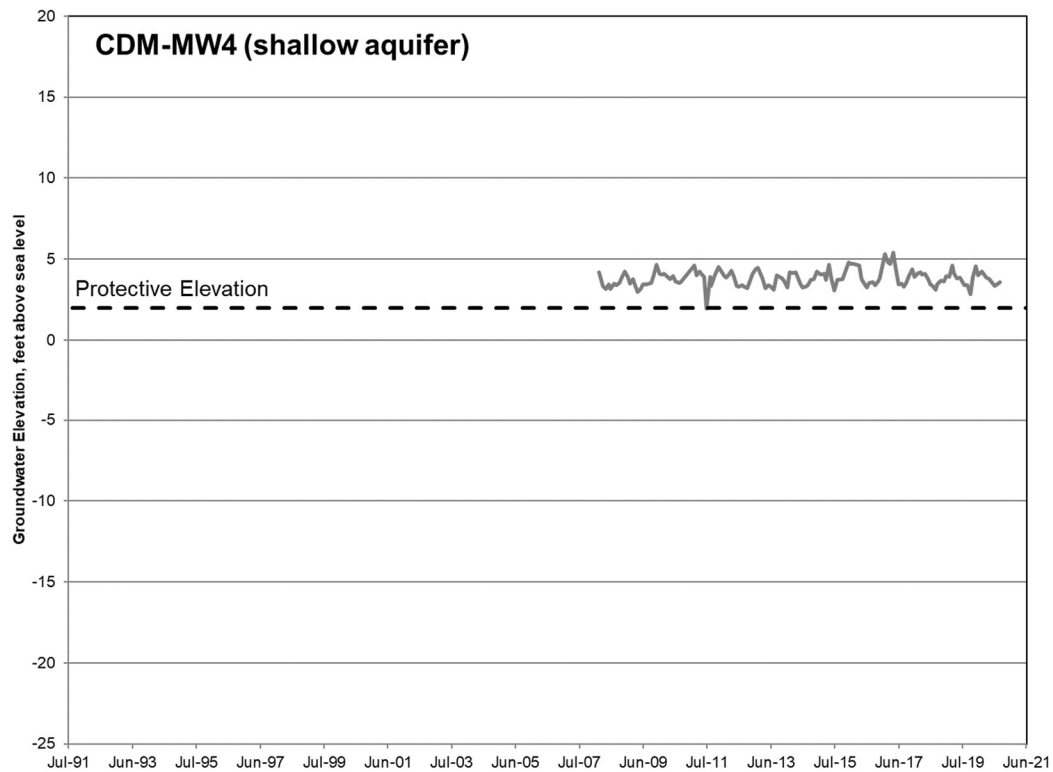


Figure 39. CDM-MW4 Groundwater and Protective Elevations

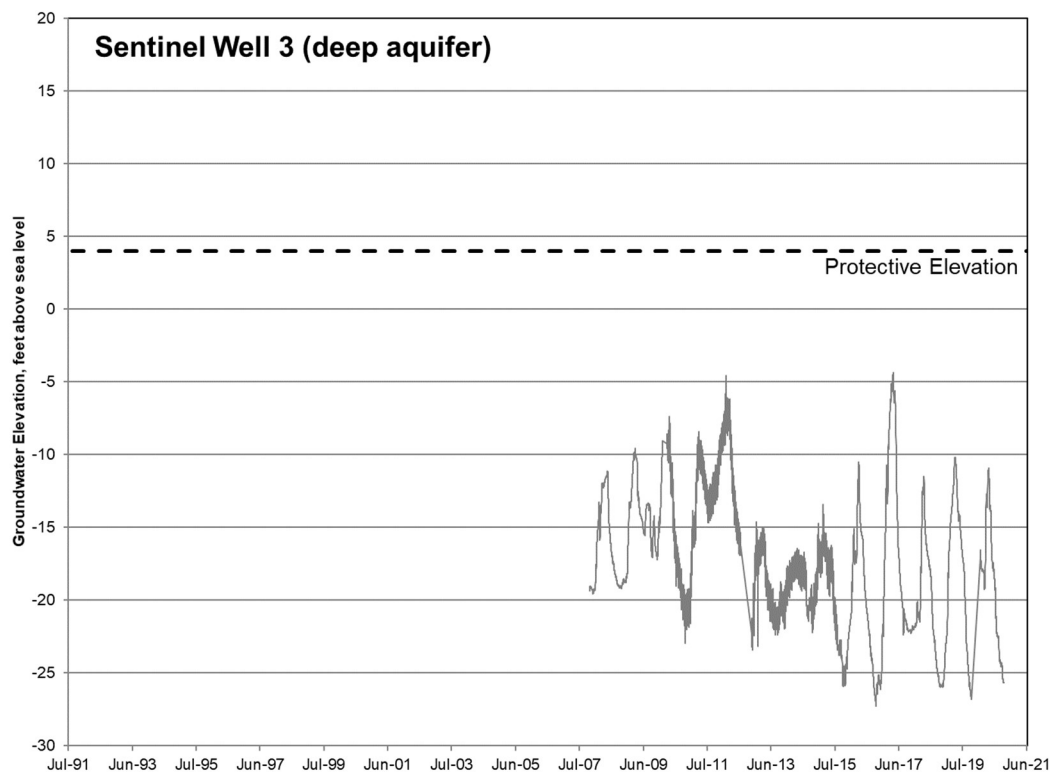


Figure 40. Sentinel Well 3 Groundwater and Protective Elevations



2.7 Groundwater Production

Groundwater pumping in excess of freshwater recharge and subsurface inflow from adjacent areas is the primary cause of seawater intrusion. Mapping pumping volumes gives an indirect indication of the threat of seawater intrusion. Ideally, pumping should be equally distributed throughout a basin, and occur relatively far inland.

Gross pumping by Watermaster producers in Water Year 2020 was 4,217.6 acre-feet, which includes recovery of 806.1 acre-feet of aquifer storage and recovery (ASR) water and for the first time, 88.4 acre-feet of recovery from the newly commissioned Pure Water Monterey (PWM) project. Net or native groundwater pumping is the amount of groundwater pumped after both ASR recovery and PWM recovery are taken into account. It is possible that in years where there is water injected and recovered, more water may be pumped from CAWC's wells to recover water injected the previous operational year.

In Water Year 2020, ASR and PWM wells injected 916.5 and 1,053.3 acre-feet, respectively, for a total of 1,969.8 acre-feet of injection. Of this injected water, 806.5 and 88.4 acre-feet were recovered, respectively for a total recovery of 894.5 acre-feet. The net or native groundwater production is therefore 3,323.1 acre-feet (gross pumping less recovery), which is 36.9 acre-feet below the Decision-ordered Operating Yield for Water Year 2020 of 3,360 acre-feet (Figure 41). The net or native groundwater produced from the basin in Water Year 2020 was 53.9 acre-feet more than in Water Year 2019. The Decision-ordered Operating Yield for Water Year 2021 will be 3,000 acre-feet.

Figure 42 shows the distribution of pumping through the basin and the volumes pumped at each production well for the past two years. The blue bar charts on Figure 42 reflect the actual or gross amounts pumped from each well and the green bar charts reflects the amount of ASR or PWM water injected. In Water Year 2020, the majority of pumping in the basin occurred at CAWC's Ord Grove No. 2, Santa Margarita #1, and Paralta production wells.

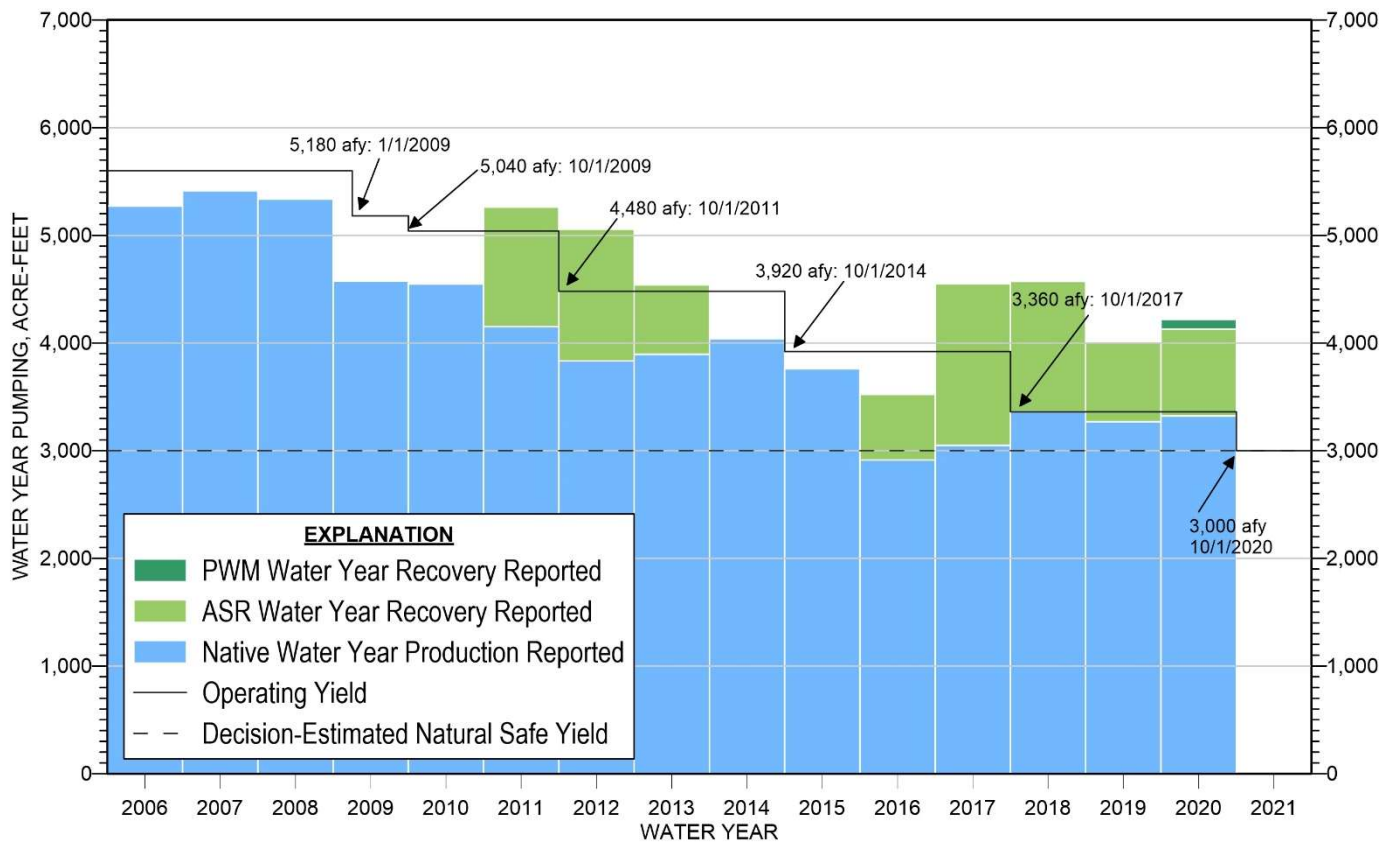
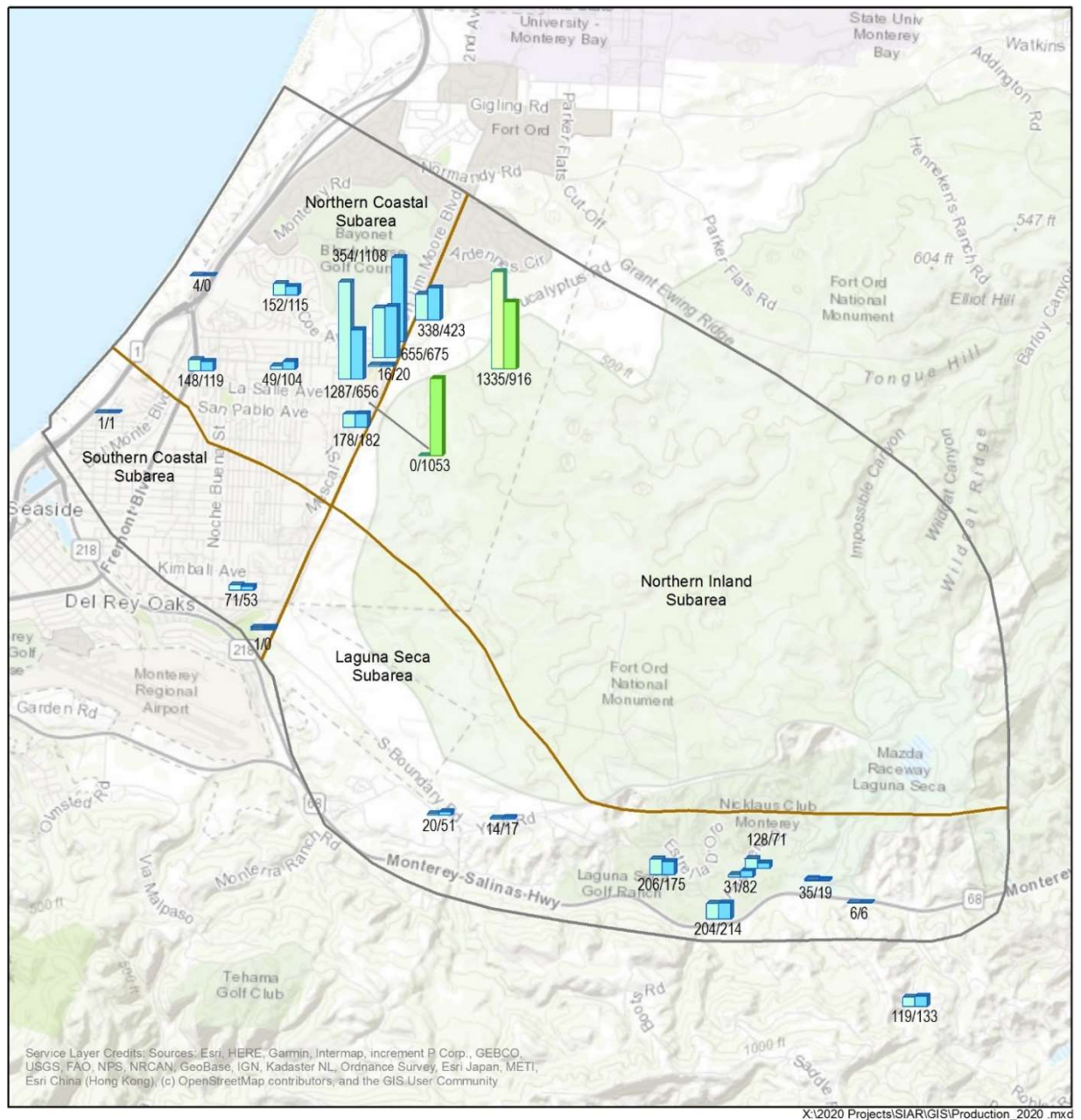


Figure 41. Annual Reported Groundwater Production and Operating Yield for Watermaster Producers



EXPLANATION

Annual Gross
Production in acre-feet



640

WY2019

WY2020

Annual Injection in acre-
feet



670

WY2019

WY2020

Adjudicated Seaside
Groundwater Basin
Boundary

Basin Boundary

Subarea Boundary

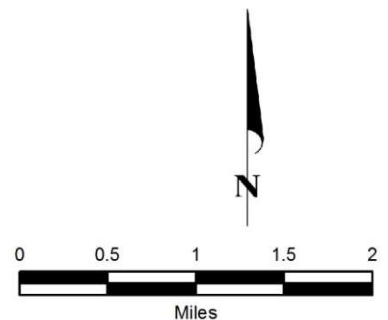


Figure 42. Watermaster Producers' Pumping Distribution for Water Years 2019 and 2020



3 CONCLUSIONS

Based on an evaluation of geochemical indicators in prior years, seawater intrusion has not historically been observed in existing monitoring and production wells in the Seaside Basin. In Water Year 2020 for the first time, what may be a precursor to seawater intrusion was detected in two monitoring wells experiencing increasing chloride concentrations. One of these is north of and outside of the Seaside Basin (monitoring well FO-10 Shallow), and the other is just inside the northern boundary of the Seaside Basin in the Northern Coastal Subarea (monitoring well FO-9 Shallow). However, none of the Watermaster's Sentinel Wells, located closer to the coastline than monitoring wells FO-9 and FO-10, detected seawater intrusion in the shallow aquifer in their induction logs. The sampling frequency for monitoring wells FO-9 Shallow and FO-10 Shallow should be increased to quarterly to establish if their chloride concentrations are true trends, or anomalous. Since the Sentinel Wells have not detected an increase in salinity, if seawater is starting to impact the FO-9 Shallow and FO-10 Shallow monitoring wells, it may be coming from the north out of the Monterey Subbasin where there is already seawater intrusion, rather than directly inland from the coastline of the Seaside Basin.

Although seawater intrusion is not occurring in any other location in the Seaside Basin from which monitoring data is being obtained, there are ongoing detrimental groundwater conditions that pose a potential threat of seawater intrusion as described below.

Groundwater levels below sea level, the cumulative effect of pumping in excess of recharge and fresh water inflows, and ongoing seawater intrusion in the nearby Salinas Valley all suggest that seawater intrusion has the potential to occur in the Seaside Groundwater Basin. Based on the findings of this report, ongoing detrimental groundwater conditions that pose a direct threat of seawater intrusion are:

- Both the Paso Robles and Santa Margarita aquifers in the Seaside Groundwater Basin are susceptible to seawater intrusion. The Paso Robles aquifer is in direct hydrogeologic connection with Monterey Bay, and seawater will eventually flow into it if inland groundwater levels continue to be below sea level. The Santa Margarita aquifer may not be in direct connection with Monterey Bay. If that is the case, then seawater intrusion will take longer to appear because the pathway for seawater into that aquifer will be longer as seawater would need to move through the clay rich deposits adjacent to that aquifer before entering the aquifer itself and thereafter make its way into Santa Margarita production wells. It is not if, but when, seawater intrusion into these aquifers will occur if protective water elevations are not achieved.
- Deep groundwater levels in the Northern Coastal subarea continue to be below sea level. The Water Year 2020 2nd quarter (winter/spring) deep aquifer coastal groundwater levels



are more than 20 feet below sea level and the 4th quarter (summer/fall) levels are more than 30 feet below sea level.

- Groundwater levels remain below protective elevations in all deep target monitoring wells (MSC deep, PCA-W Deep, and sentinel well SBWM-3). Currently, MSC Shallow one of the three shallow wells with protective elevation has its groundwater levels below its protective elevation. Last year, groundwater elevations at PCA-W Shallow were temporarily just above its protective elevation, but they returned below its protective elevation in Water Year 2020.

It is important to remain vigilant and to closely monitor groundwater quality even though seawater intrusion has not yet been observed in monitoring or production wells in the Seaside Groundwater Basin. As outlined in the most recent Basin Management Action Plan (Montgomery & Associates, 2018a), it is important that the Watermaster continues to identify ways to reduce pumping native groundwater and/or to recover groundwater elevations with water that is left in the basin and is not extracted out as water supply.

Evidence from this report that demonstrates seawater intrusion is not occurring is:

- Most groundwater samples for Water Year 2020 from depth-discreet monitoring wells generally plot in a single cluster on Piper diagrams, with no water chemistry changes towards seawater. Increased chloride in recent measurements at FO-9 Shallow and FO-10 Shallow has shifted how these wells plot on Piper diagrams. Currently, they appear to be shifting towards a chlorinated water type, however they still generally plot between sodium-chloride and sodium-bicarbonate type waters.
- In some production wells, groundwater quality plot on Piper diagrams is different than the water quality in the monitoring wells. This may be a result of mixed water quality from both shallow and deep zones in which these wells are perforated. None of the production wells' groundwater qualities are indicative of seawater intrusion.
- None of the Stiff diagrams for monitoring and production wells show the characteristic chloride spike that typically indicates seawater intrusion in Stiff diagrams. The Stiff diagrams for monitoring wells FO-9 Shallow and FO-10 Shallow show a slightly different shape than other shallow wells because of their increased chloride.
- Chloride concentration trends were stable for most monitoring wells, except FO-9 Shallow and FO-10 Shallow. Monitoring well FO-09 Shallow has experienced increased chloride concentrations in all three samples taken during Water Year 2020, in addition to increases observed in the three samples taken last water year. The increase in concentrations between Water Years 2019 and 2020 is around 13 mg/L, which is greater than fluctuations observed historically over its period of record. Monitoring well FO-10



Shallow experienced a 48 mg/L increase in chloride concentrations in the sample taken this year. The elevated concentrations in themselves do not indicate seawater intrusion, however, these wells should both be monitored quarterly over the next year to determine if the increasing chloride concentrations are temporary or not.

- Sodium/chloride molar ratios in most monitoring wells remained constant or increased over the past year. Monitoring well FO-09 Shallow experienced an increase in chloride as mentioned above, and its sodium/chloride ratio of 0.82 in Water Year 2020 is now just above its historical minimum of 0.81. Monitoring well FO-10 Shallow also experienced an increase in chloride and has a sodium/chloride ratio of 0.79 in the sample collected this year (0.79). Sodium/chloride ratios at both of these wells are now below the 0.86 ratio that may identify seawater intrusion as the source of chloride as opposed to a domestic wastewater source
- Maps of chloride concentrations for the shallow aquifer do not show chlorides increasing towards the coast. However, northern monitoring wells FO-9 Shallow and FO-10 Shallow have recently increased chloride concentrations, but at concentrations still less than 100 mg/L. The deep aquifer maps show that the highest chloride concentrations are limited to coastal monitoring wells PCA-West Deep and MSC Deep, but these are not indicative of seawater intrusion since their concentrations are less than 155 mg/L and they do not have increasing trends.
- Induction logging data at the coastal Sentinel Wells do not show historical or recent changes over time that are indicative of seawater intrusion.

Other important findings from the analysis contained in this report are:

- Due to its distance from the coast, seawater intrusion is not an issue of concern in the Laguna Seca subarea. However, groundwater levels in the eastern Laguna Seca subarea have historically declined at rates of 0.6 feet per year in the shallow aquifers, and up to four feet per year in the deep aquifers. These declines have occurred since 2001, despite triennial reductions in allowable pumping. The cause of the declines is due in part to the Natural Safe Yield of the subarea being too high and in part due to the influence of wells to the east of the Seaside Basin. Although there was some stabilization in groundwater levels between Water Years 2014 and 2016, groundwater levels are continuing to decline. The rate of decline now, however, is less than 0.6 feet per year.
- Native groundwater production in the Seaside Groundwater Basin for Water Year 2020 was 3,323.1 acre-feet, which is 53.9 acre-feet more than Water Year 2019. The amount of native groundwater pumped in Water Year 2020 is 36.9 acre-feet less than the Decision-ordered Operating Yield of 3,360 acre-feet per year that is required between



October 1, 2017 and September 30, 2020. The Decision-ordered Operating Yield starting in Water Year 2021 will be 3,000 acre-feet.



4 RECOMMENDATIONS

The analyses presented previously in this report are based on existing data. While informative, the data are spatially incomplete and temporally sporadic. The following recommendations should be implemented to monitor and track seawater intrusion.

Immediately Resample Monitoring Well FO-10 Shallow to Confirm 48 mg/L Chloride Concentration Increase

As per the Seawater Intrusion Response Plan, a confirmation sample is needed when there is a larger than typical increase in chloride. A confirmation groundwater sample for monitoring well FO-10 Shallow was collected on November 10, 2020 with laboratory results expected within a month. MPWMD staff took a field electrical conductivity measurement during sampling that appeared to indicate a similar conductivity to the sample collected the previous month with a chloride concentration of 89.9 mg/L.

Increase Sampling Frequency at Monitoring Wells FO-9 Shallow and FO-10 Shallow Due to Recent Corresponding Increases in Chloride Concentrations

Based on recent corresponding increases in chloride concentrations at monitoring wells FO-9 Shallow and FO-10 Shallow, both in relatively close proximity to known intrusion in the Salinas Valley, it is recommended that their sampling frequency be increased to quarterly and that their groundwater quality results be reviewed after each sampling event to identify if the recent increases are part of natural fluctuations or an ongoing increasing trend. Monitoring well FO-9 Shallow is currently monitored on a semi-annual basis, increased from annual sampling, because an increasing chloride trend had previously been observed. Monitoring well FO-10 Shallow is currently monitored on an annual basis.

Continue to Analyze and Report on Water Quality Annually

Seawater intrusion is a threat to the basin, and data must be collected and analyzed regularly to identify incipient intrusion. Maps, graphs, and analyses similar to what are found in this report should continue to be developed every year.

Include Data from New Monitoring Wells Installed as Part of Recharge Projects

There are a number of projects being implemented or planned in the Seaside Basin that involve recharge and recovery of imported water. It is important that data from new monitoring wells that are part of these projects be reported to the Watermaster and taken into consideration in future SIARs. This is because it is expected that these projects will change groundwater levels in their vicinity and beyond, which in turn changes groundwater flow directions and hydraulic gradients. Being able to determine if the benefits of these projects reduce the threat of seawater intrusion is an added important aspect of the annual reporting. The first such project likely to be



implemented is Pure Water Monterey. Watermaster staff worked in 2020 to identify monitoring wells associated with Pure Water Monterey that would be beneficial to the SIAR. Data from these wells will start to be incorporated into the SIAR in Water Year 2021.



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EXHIBIT H

SEASIDE GROUNDWATER BASIN
WATERMASTER

TO: Board of Directors

FROM: Robert S. Jaques, Technical Program Manager

DATE: December 2, 2020

SUBJECT: Obtaining additional water to recharge the Basin in order to raise groundwater levels

RECOMMENDATIONS:

It is recommended that the Board discuss, and provide direction to staff on, how additional water could be obtained to recharge the Basin in order to raise groundwater levels so that the Basin does not continue to be at risk of seawater intrusion.

BACKGROUND:

At its September 2, 2020 meeting the Board discussed the groundwater level impacts of two potential scenarios, one involving the Cal Am proposed desalination plant and one involving an expanded Pure Water Monterey (PWM) project. The already-in-operation initial PWM project includes both an Operating Reserve of 1,000 AF, and a Drought Reserve of 1,000 AF. These volumes of PWM water are intended to be left in the Basin, and only used when necessary to meet demands and subsequently replenished to these levels whenever they are used. However, it was concluded that neither the desalination plant nor the expanded PWM project, in conjunction with the already-in-operation initial PWM project including these reserves, will enable groundwater levels to reach protective elevations. It is clear that in order to protect the Basin against the threat of seawater intrusion it will be necessary to obtain additional recharge water that can be left in the Basin and not pumped out, in order to achieve protective groundwater elevations. Previous groundwater modeling indicated that on the order of 1,000 AFY of recharge water, injected into and left in the Basin over a 25-year period, might be necessary to achieve protective elevations.

DISCUSSION

If the Board wishes to discuss this topic, here are some issues to consider:

- Does the Adjudication Decision have any specific requirements directing the Watermaster to obtain additional recharge water to protect the Basin, or is the Watermaster only required to see that pumping is reduced to the Natural Safe Yield, even if that does not protect the Basin against the threat of seawater intrusion? Note that Exhibit A to the Decision, titled *“Principles and Procedures for the Seaside Basin Monitoring and Management Plan,”* includes this wording in the section titled “Plan Criteria”:

“Within one year after entry of the Judgment by the Court, the Watermaster will: ... (d) develop a plan of action to be implemented to avoid various adverse effects in the Basin, including seawater intrusion; and (e) develop a plan of action to contain seawater intrusion should it occur. The plan of action to avoid adverse effects in the Basin shall include a timeline for the importation of Non-Native water for spreading or injection into the Basin, and for acquisition of recycled water in lieu of Native Water production, and shall outline concrete steps to be taken to secure both Non-Native water and recycled water.”

This language appears to impose the expectation that the Watermaster will take steps to secure water to replenish the Basin to protect it against seawater intrusion.

- If the desalination plant is constructed, there will initially be surplus production capacity that won't be needed until sometime in the future, as demand increases to reach the plant's full capacity. This is a potential source of additional water. The quantity of additional water that the plant could potentially provide for groundwater recharge would need to be determined in order to see if that quantity would be sufficient to achieve protective elevations.
- If the desalination plant is constructed, and were to provide only a portion of the amount of recharge water that is needed, could the initial Pure Water Monterey project be expanded somewhat to augment the Cal Am desalination plant water in order to achieve protective elevations?
- If the desalination plant is not constructed and the Pure Water Monterey Expansion Project is constructed, could it be further expanded to provide the full amount of recharge water that is needed to achieve protective elevations?
- There would be an operational cost of operating the Cal Am desalination plant at greater production capacity than is needed to supply Cal Am's customer demands. Similarly, there would be an operational cost of operating further-expanded Pure Water Monterey Projects. Who would pay for those additional costs? Would the costs be charged on an incremental basis, i.e. just the additional cost to produce the additional water, or would they be charged at the unit cost of water from these initial projects, which includes all of the capital and operational costs of these respective projects?
- More modeling would need to be done to refine the amount of recharge water needed to achieve protective groundwater elevations by injecting it at the PWM wells. Would it be beneficial to perform that modeling work now in order to better determine the most cost-effective approach to getting the necessary recharge water?

FISCAL IMPACT:

Other than Watermaster staff costs to investigate the bulleted items above and report findings to the Board, the only apparent fiscal impact would be if modeling were to be performed. This would involve having Montgomery & Associates use the Seaside Basin Groundwater Model to refine the amount of recharge water that would be needed. If the Board wished to have this work performed, staff would request from Montgomery & Associates a scope of work and cost proposal and present that to the Board for its consideration and approval before any such work would be undertaken. There is money in the approved 2021 Monitoring and Management Program Operations Budget to cover the expected costs of such modeling.

EXHIBIT I



Richard Svindland P 619-446-4761
President F 619-230-1096
California American Water
655 W. Broadway, Suite 1410
San Diego, CA 92101
www.calamwater.com

May 9, 2020

VIA ELECTRONIC MAIL

Board of Directors
Monterey One Water
5 Harris Court, Building D
Monterey, CA 93940

RE: Pure Water Monterey Project—Cost, Operational Performance and Status

Dear Chair Stefani and M1W Board Members:

We are writing this letter to you to express our concerns about certain cost overruns, delays, and operational issues associated with the Phase 1 Pure Water Monterey Project (intended to provide 3,500 afy of recycled water as part of the Monterey Peninsula Water Supply Project portfolio). Although we have made several requests for information to Monterey One Water (M1W) and Monterey Peninsula Water Management District (MPWMD) staff, we have yet to obtain a clear understanding of these issues, as well as sufficient detailed cost documentation necessary for California American Water (Cal Am) to make the necessary filings with the California Public Utilities Commission (CPUC) in order to determine and authorize recovery of the Company Water Rate, as established by the Water Purchase Agreement (WPA) among Cal Am, M1W, and MPWMD.

As you know, on July 2, 2019, Cal Am provided MPWMD and M1W with notice that an Event of Default had occurred in that the Delivery Start Date had not occurred as required in the WPA. Cal Am was told in general terms at that time that the project was in its final stages, the Delivery Start Date was anticipated to occur by mid-October, and Cal Am would receive periodic updates on the proposed start date. This did not formally occur. Then, on January 2, 2020, Cal Am provided notice that a second Event of Default had occurred in that the Performance Start Date had not been achieved. In these Notices, as well as in correspondence dated December 12, 2019, and January 22, 2020, Cal Am has repeatedly requested detailed information about the current status of the project, anticipated start dates, and any issues that may further delay the project. Additionally, Cal Am has repeatedly and specifically requested current and anticipated total capital costs, operation and maintenance costs, and purchase water costs per acre-foot compared to and shown against the original cost estimate used before the CPUC to develop the WPA. Although Cal Am has been provided some information in the past, that information has lacked sufficient detail or clarity to submit to the CPUC for review.

The Pure Water Monterey Project is a critical component of the Monterey Peninsula Water Supply Project, and as the purchaser of the project's product water, and the water supplier to the Monterey Peninsula, Cal Am must receive detailed and timely information about the project as it is being developed in order to plan for water supplies. Cal Am also has an obligation to review the financial aspects of the project to ensure that its ratepayers are not overcharged, do not bear a disproportionate burden, or face any other issues. As described in more detail below, Cal Am requests a full and complete report on projected costs, projected schedule, and current performance. Finally, given these outstanding concerns with the Pure Water Monterey Project, Cal Am remains even more concerned about the viability of the Expanded Pure Water Monterey Project (Expansion Project), should that project proceed despite the insufficiency of its environmental review. These concerns are also detailed below.

A. Pure Water Monterey Cost Analysis

In CPUC proceeding A.12-04-019, to respond to the CPUC's questions about certain aspects of the Pure Water Monterey Phase 1 Water Purchase Agreement, Cal Am, M1W and MPWMD submitted Joint Supplemental Testimony on the Phase 2 decision in 2016. To address specific concerns about the cost of water and an annual true-up, the parties provided the CPUC with Attachment 4 to the Joint Supplemental Testimony, an Example Budget for Year 1 Cost of Water showing the calculation for a year 1 water rate of \$1,720 per acre-foot and listing separately various fixed project costs and operation and maintenance expenses. Attachment 4 also included an Example of True-Up for Year 2 revising the calculation to support a year 2 rate of \$1,677 per acre-foot, and an estimated cost of operation for each new facility. Ultimately, the CPUC did not approve an actual rate of \$1,720; rather, it approved a rate of \$1,720 or less, and Cal Am is required to include with its Tier 1 advice letter support for a rate of at least \$1,720 per acre-foot.

In early March 2020, M1W and MPWMD staff presented to Cal Am a new cost summary for water years 2019-20, 2020-21 and 2021-22, projecting annual costs per acre-foot of \$2,198, \$2,398 and \$2,599 respectively. Despite repeated requests to match the cost analysis presented to the CPUC in Attachment 4 to the Joint Supplemental Testimony, the new summary deviated from this format, making it very difficult to understand the cost increases. Then, in a letter dated April 29, 2020, Cal Am was advised of a further increase in the Company Water Rate, to \$2,442 for FY 2020-21, and \$2,639 for 2021-2022. The April 29, 2020 letter also noted that construction costs are just now being calculated, and other costs having a bearing on the rate are being estimated. Again, the April 29, 2020 letter failed to present cost components in the format previously presented to the CPUC, and does not allow for a comparison of current cost components to those previously provided. We therefore request an update to Attachment 4 be prepared, with a new column showing the current estimate of each cost component previously submitted to the CPUC. Additionally, Cal Am notes that the April 29, 2020 letter assumes delivery of 3,700 acre-feet per year (3,500 afy allocated to Cal Am; 200 afy for drought reserve), but based on Pure Water Monterey performance deficiencies to date (see Section C below), the rates could be dramatically higher if delivery of 3,700 acre-feet per year is not realized.

Finally, the April 29, 2020 letter concludes that, after the Performance Start Date, billing for the amounts injected into the Basin will be sent by MPWMD to Cal Am for review and payment. Please note that under the WPA, Cal Am has "no obligation to make Company Water Payments unless and until the CPUC approves payment and recovery of those payments in rates..." (WPA §18.) First, Cal Am must file a Tier 1 advice letter seeking approval and recovery of the \$1,720 per acre-foot rate. This advice letter is effective upon filing pending CPUC approval. In order to file the Tier 1 advice letter, Cal Am requires detailed information relating to the fixed project

costs and the estimated operation and maintenance expenses to be incurred in the upcoming fiscal year to support the \$1,720 per acre-foot rate, as well as the projected and actual Performance Start Date. Cal Am has no obligation to make Company Water Payments until the CPUC approves the Tier 1 advice letter.

To the extent that Pure Water Monterey seeks to charge an amount in excess of the soft cap of \$1,720 per acre-foot, Cal Am will have to file a Tier 2 advice letter seeking approval of the higher rate. As Cal Am has noted in previous correspondence, in order to file the Tier 2 advice letter Cal Am will need information supporting the higher Company Water Rate, including detailed information related to fixed project costs and estimated operations and maintenance expenses, as well as data regarding the initial performance of Pure Water Monterey project. Unless and until the Tier 2 advice letter is approved by the CPUC, Cal Am is only required to pay an amount equal to the soft cap of \$1,720 per acre-foot as the Company Water Rate. (WPA §16.)

B. Pure Water Monterey Performance Start Date

The April 29, 2020 letter informs Cal Am of an estimated Performance Start Date of August 10, 2020, a nearly eight-month delay from WPA's Performance Start Date of January 1, 2020. That letter also notes that this date may continue to vary due to injection rates and well performance. As noted below, Cal Am has significant concerns about both injection rates and well performance, and given the reliance the CPUC, Cal Am and the public have placed on Pure Water Monterey's ability to serve water, Cal Am requests a detailed explanation of the Pure Water Monterey Project's current and projected performance status.

C. Pure Water Monterey Current Operational Status

Cal Am has recently become aware of certain operational problems that could jeopardize M1W and MPWMD's ability to comply with the terms of the WPA. Specifically, we are aware of sinkholes or subsidence affecting the shallow wells that may not be repairable, that certain deep wells are experiencing injection refusal and are functioning at rates of 60% or less, and that not all of the source waters identified and intended for treatment by the Pure Water Monterey facility have been utilized since startup. Additionally, just this past Monday, May 4, 2020, during a public meeting of the MPWMD Water Supply Planning Committee, we learned that the monthly injection volume for April was only 214 acre-feet, which equates to an annual volume of 2,568 afy. This is far less than the 3,500 afy allocated for Cal Am and much less than the 5,600 afy design capacity of the Pure Water Monterey Project. In order to gain a full understanding of the true status of the project and its likelihood of success, we request the following information:

- Please provide the Pure Water Monterey treatment facility monthly production volumes since start-up.
- Please identify, and provide the monthly volumes of, each source water that has been diverted and treated through the Pure Water Monterey facility since start-up (i.e., agricultural wash water, Reclamation Ditch, Blanco Drain, etc.)
- Please provide the capacity utilization factors for each of the injection wells (shallow and deep wells) versus design capacity. Please also provide the individual well injection rates in gallons per minute, volumes per month, and well run time. Please fully explain any reasons for not achieving full capacity and the corrective action plan to address.

- Please indicate and explain based on actual achieved injection well rates, if there is sufficient capacity to meet the Pure Water Monterey treatment design capacity and contractual supply obligations, and whether there exists sufficient injection well redundancy to achieve full capacity on a consistent and sustainable basis anticipating well downtime, maintenance, and the natural decline of well capacity over time.
- Please provide the proposed remedies, estimated costs, and schedule to address deficiencies in performance as compared to the basis of design for the source water facilities, treatment plant, and/or wells.

Cal Am, the CPUC, the State Water Board, and Cal Am's customers on the Monterey Peninsula are all relying on M1W to timely deliver 3,500 afy from Pure Water Monterey as part of the MPWSP. However, M1W and MPWMD staff have not provided clarity or transparency into the project's technical difficulties, or the reasons for the added costs and delay.

D. Expanded Pure Water Monterey Project

With the ongoing delays, cost overruns and feasibility issues plaguing the Pure Water Monterey project, and especially with the deficiencies in the Expansion Project SEIR recognized by M1W in the Board's decision to deny the SEIR's certification, Cal Am remains concerned with the overall feasibility of the Expansion Project if it ever moves forward. The M1W Board has consistently taken the position that the Expansion Project is a backup to desalination, but at the same time M1W and MPWMD staff continue to advocate to the Coastal Commission, other agencies, and the public that the Expansion Project is a viable alternative to desalination. But whether a backup to supplement desalinated water supplies, a backup interim supply to be shut down when the desalination plant is operational, or an alternative to desalination, Cal Am does not believe the Expansion Project to be feasible.

- As a backup project to supplement desalination

As you know, in its 2018 Decision, the CPUC ordered Cal Am to investigate whether ***in conjunction with the MPWSP*** the Expansion Project could provide an affordable, specific, concrete, safe, reliable ***additional or supplemental*** source water supply for Cal Am's ratepayers. Notably, the Expansion Project's SEIR failed to analyze the cumulative impacts of the Expansion Project and the MPWSP, and so Cal Am is unable to review potential environmental impacts of the operation of both projects. Cal Am has also raised concerns about the reliability of the Expansion Project. In any event, with information currently available about schedule delays, performance issues, and cost overruns of the Phase 1 project, Cal Am believes it is highly unlikely that the Expansion Project combined with desalination would provide an affordable water supply.

- As a replacement or alternative to desalination

Disregarding both the CPUC's decision and the M1W board's resolution that the Expansion Project was to serve as a backup water supply to desalination, certain staff members of both M1W and the MPWMD have repeatedly advocated for the Expansion Project as a replacement to desalination, urging the Coastal Commission and other agencies to reject desalination. Moreover, relying solely on a speculative report prepared by MPWMD's general manager, Mr. Stoldt, the Expansion Project SEIR states, contrary to the findings of the CPUC, that either the desalination plant or the Expansion Project can meet the long term demands of the Monterey Peninsula, and either option would be sufficient to lift the SWRCB Cease and Desist Order. Cal

Am has repeatedly expressed its disagreement with the analysis and conclusions made by Mr. Stoldt, and given the deficiencies in the availability, reliability, and adequacy of source water, it is very likely that the Cease and Desist Order will remain in place if the Expansion Project moves forward and takes the place of desalination.¹

Condition 15 of State Water Board Order 2016-0016 makes clear what is needed to lift the CDO:

The conditions of this Order, State Water Board Order WR 2009-0060 and State Water Board Order 95-10 shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with the certification.

The Expansion Project is neither an adequate nor a permanent water supply sufficient to meet the needs of the Peninsula, and the water rights it claims are merely interruptible use entitlements, not permanent water rights. Those claimed entitlements are also disputed by the actual holders of the water rights, as set forth in comment letters submitted to M1W by the City of Salinas, Monterey County Water Resources Agency, Castroville Community Services District, and Monterey County Farm Bureau, among others. As Cal Am has advised M1W in the past, any water purchase agreement for the Expansion Project as a replacement to desalination would require M1W to guarantee the full production volume, and provide a full indemnification to Cal Am against any risk, liability or penalties in the event the Pure Water Monterey Project fell short for any reason.

- As a backup to desalination to be shut down when desalination is online

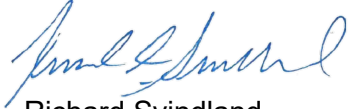
The Final SEIR takes the position that “M1W will cease treating and delivering the expanded quantities of water associated with operation of the Proposed Modifications once CalAm’s MPWSP desalination project operates to deliver the same or more water to the CalAm Monterey District service area.” Any water purchase agreement for the Expansion Project as a temporary backup while permitting and construction of the desalination plant is underway would necessarily have a very short term, and as such would likely not be feasible for M1W. And in the event that the Coastal Commission denies Cal Am’s application for a slant well permit, any such water purchase agreement would then need to revert to the concrete terms described above in order for the Expansion Project to operate as a permanent water supply and a replacement to desalination.

¹ The State Water Board does not support Mr. Stoldt’s conclusions on Monterey Peninsula water demand. As stated in its May 8, 2020 letter to the California Coastal Commission (attached hereto), the State Water Board concludes as follows: “State Water Board staff has also reviewed the available documents regarding Monterey Peninsula water supply and demand and has discussed drinking water requirements, including standards for new and existing water source capacity, with Coastal Commission staff and other parties. Even though actual water use within Cal-Am’s Monterey District service area in recent years has been lower than the Public Utilities Commission’s estimated current demand, **State Water Board staff does not have a basis to conclude that the Public Utilities Commission’s prior analysis and determinations regarding the water demand, sizing, reliability, or diversity of supply were unreasonable, invalid, or outdated.**” (Emphasis added.)

E. Conclusion

The Pure Water Monterey Project is a critical component of Cal Am's planned portfolio to serve the Monterey Peninsula and reduce Carmel River diversions. To date, Cal Am has not received from M1W and MPWMD staff the detailed information and timely updates about the project it needs to fully understand the ability of the project to serve Cal Am's customers. Therefore, in addition to the information specifically requested in this letter, Cal Am requests that the M1W Board authorize an independent audit into the current status of the project, its expected cost and completion date, and its ability to fully deliver the potable water promised.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard Svindland", is positioned above the printed name.

Richard Svindland
President
California-American Water Company

cc (by email): David Stoldt, General Manager, MPWMD
 Paul Sciuto, General Manager, M1W

ATTACHMENT

State Water Resources Control Board

May 8, 2020

Mr. John Ainsworth
Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

John.Ainsworth@coastal.ca.gov

RE: Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034 (California American Water Company)

Dear Mr. Ainsworth:

I write to express the State Water Resources Control Board's (State Water Board) interests in the Coastal Commission's timely action on the above-referenced proceedings, regarding California American Water Company's (Cal-Am) consolidated application and appeal for a coastal development permit for its proposed 6.4-million-gallon-per-day desalination project, the Monterey Peninsula Water Supply Project (Project). As I explained in oral comments to the Coastal Commission at the November 14, 2019 meeting, the State Water Board's efforts to resolve long-standing problems caused by excessive diversions from the Carmel River depend on prompt resolution of Cal-Am's application and appeal. We therefore urge the Coastal Commission to act on the permit at its meeting in August 2020.

Background on Long-standing Unlawful Diversions from the Carmel River

As summarized in the Coastal Commission's staff report dated October 28, 2019, the State Water Board has ordered Cal-Am to terminate its unauthorized diversions from Carmel River no later than December 31, 2021. The State Water Board is concerned not only about longstanding and continuing violations of state water rights law but also the diversions' negative impacts on public trust resources of Carmel River, which provides habitat for the federally threatened South-Central California Coast Steelhead Distinct Population Segment, the federally threatened California red-legged frog, and the candidate western pond turtle, and which also supports coastal wetlands and riparian vegetative communities.

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

Since 1995, Cal-Am has been required to “diligently implement . . . actions to terminate its unlawful diversions,” and its inadequate progress led the State Water Board to issue a cease and desist order in 2009 requiring Cal-Am’s full compliance by the end of 2016. (State Water Board Order WR 95-10, p. 40; State Water Board Order WR 2009-0060, p. 57.) Most recently, after additional setbacks in the development of a local water supply project to replace Cal-Am’s continuing unauthorized Carmel River diversions, the State Water Board extended the compliance deadline to the end of 2021. At the same time, the State Water Board established enforceable interim milestones and effective diversion limits to ensure “that the State Water Board will not again find itself in the same position of again extending the compliance deadlines” (State Water Board Order WR 2016-0016, pp. 9, 19-24 [Order WR 2016-0016].) The State Water Board identified the Project, together with the 3,500-acre-foot-per-year Pure Water Monterey project and Cal-Am’s existing rights to Carmel River and the Seaside Basin, as a viable path to ending Cal-Am’s unlawful diversions from Carmel River by the end of 2021.

The State Water Board set milestones based on development of the Pure Water Monterey project and the Project accordingly, and it indicated that it would consider modifying the order’s milestones if another feasible, larger-scale water supply project were to emerge to terminate Cal-Am’s unauthorized diversions by the end of 2021. (Order WR 2016-0016, pp. 15-16 & 20, fn. 17.) But the State Water Board has also established conditional reductions in Cal-Am’s interim effective diversion limit, to ensure that “diversion limits are ratcheted down such that unlawful diversion end by December 31, 2021 regardless of whether Cal-Am meets the milestones.” (*Id.*, p. 13.) The cease and desist order, including the prohibition against new service connections and against certain increased water deliveries to existing service connections, will only be resolved or “lifted” after Cal-Am satisfactorily demonstrates that it has “obtained a *permanent* supply of water that has been substituted for water illegally diverted from the Carmel River.” (*Id.*, ordering paragraph 15 [p. 27], italics added.)

Cal-Am has satisfied all milestones to date and in recent years obtained important approvals to construct the Project, including the Public Utilities Commission’s certification of the final environmental impact report (Final EIR)¹ and issuance of a certificate of public convenience and necessity, as well as the County of Monterey’s issuance of a development permit for the desalination plant. This trend shifted beginning in the later part of 2019.

Recent Developments Have Caused Delay

¹ Because a portion of the Project is proposed within the Monterey Bay National Marine Sanctuary (MBNMS), the Public Utilities Commission and the National Oceanic and Atmospheric Administration (NOAA), the lead agency under the National Environmental Policy Act, prepared a joint Final EIR and Environmental Impact Statement (EIS). MBNMS Superintendent Paul Michel stated at the Coastal Commission’s November 19, 2019 meeting that NOAA worked with the Public Utilities Commission and the consultant team to “ensure that the Final EIR/EIS identified all potential impacts and met all levels of NEPA sufficiency.”

Since the Commission's November 14, 2019 meeting in Half Moon Bay, the scheduled date for completion of the hearing and Coastal Commission action on the Project application and appeal has shifted from March 2020, to June 2020, and now given extensions related to the COVID-19 emergency, to August or September 2020. Coastal Commission staff has indicated a continued desire for Cal-Am to withdraw its application, thereby removing any deadline for Coastal Commission action on the Project, until after Coastal Commission completes an extended review and investigation of various issues, including the Project's groundwater impacts and the Monterey Peninsula's projected water supply and demand.

The Coastal Commission states that the delay is due to a need to resolve these remaining technical questions. But these issues have already been resolved by the Public Utilities Commission, after extensive environmental review and consideration of evidence and testimony over a multi-year adjudicative proceeding. (See Public Utilities Commission Decision 18-09-017 & Decision 19-01-051. See also *Marina Coast Water District v. Public Utilities Commission*, review den. Dec. 12, 2018, S251935; *City of Marina and Marina Coast Water District v. Public Utilities Commission*, review den. Aug. 28, 2019, S253585.) Importantly, several of the Coastal Commission staff's recommendations and findings from November 2019 regarding the Project are contrary to the Public Utilities Commission's determinations. Coastal Commission staff suggests the Public Utilities Commission acted on either incomplete or outdated information regarding these issues. The State Water Board does not agree.

State Water Board staff has reviewed the existing hydrogeologic studies and reports, including Weiss Associates' independent hydrogeological review of more recent data and studies dated November 1, 2019 (Coastal Commission, Items Th8a & Th9a, Exhibit 7) and Weiss Associates' proposed scope of work for an additional "aquifer impacts" analysis dated March 11, 2020. State Water Board staff has concluded that the North Marina Groundwater Model already conducted, revised, and relied upon by the Public Utilities Commission as part of its certified Final EIR (see, e.g., Section 4.4, Section 5.5.4, and Appendices E2 and E3), provides a conservative overprediction of the volume of shallow, inland water that the Project would capture during full operation.

The Project's test slant well was operated for over two years and has shown minimal impacts to groundwater levels approximately 2,100 ft from the well (at MW-4) and little to no impacts to groundwater levels further inland (at MW-7). The existing model predicts hydraulic impacts much farther inland than has been observed during actual operation. Efforts to calibrate the model to better match observed data would result in an increase in the simulated extraction of seawater and less simulated capture of inland groundwater compared to existing modeling results. Accordingly, even if the additional investigation, monitoring, and modeling could provide some instructive data or information, any new information obtained from this work would not undermine or substantially change the current understanding of the hydrogeologic system. State Water Board staff's opinion remains that the groundwater impacts of the Project will not be any greater than those stated, analyzed, and mitigated under the Public Utilities Commission's certified Final EIR.

Furthermore, the additional groundwater analysis proposed to be conducted by Weiss Associates would focus on an area of approximately two square miles, which is approximately 1% of the area covered by the existing model. Refinement of the model in this relatively small area would not result in substantial differences in the model output. Given that the additional information will not further inform the Coastal Commission's decision regarding the Project's alleged "depletion of ground water supplies" (Pub. Resources Code, § 30231)², the additional six months (or more) this work is expected to take is not necessary.

State Water Board staff has also reviewed the available documents regarding Monterey Peninsula water supply and demand and has discussed drinking water requirements, including standards for new and existing water source capacity, with Coastal Commission staff and other parties. Even though actual water use within Cal-Am's Monterey District service area in recent years has been lower than the Public Utilities Commission's estimated current demand, State Water Board staff does not have a basis to conclude that the Public Utilities Commission's prior analysis and determinations regarding the water demand, sizing, reliability, or diversity of supply were unreasonable, invalid, or outdated.

The delays in proceedings before the Coastal Commission and the resulting effects on other proceedings, including the State Land Commission's processing of Cal-Am's general lease application and the Superior Court of Monterey County's prolonged stay of the County's issued development permit, will almost certainly prevent Cal-Am from meeting the 2020 and 2021 milestones for construction and completion of the Project under Order WR 2016-0016. In the State Water Board's observation, further Coastal Commission delay will also limit Cal-Am's ability or willingness to consider and pursue, let alone fund and construct, other short-term or long-term water supply alternatives to terminate unauthorized diversions from Carmel River as required no later than December 31, 2021.

For example, the proposed schedule for implementing a 2,250 acre-foot-per-year Pure Water Monterey expansion has itself already been delayed well beyond December 31, 2021, and requires approvals and funding for which the details are uncertain and the timeline is indefinite. In practice, Pure Water Monterey expansion appears to be viewed by the Coastal Commission and others not merely as a "back-up" to, but rather as a potential full substitute for, the Project. It is uncertain whether or when the proposed

² Despite Coastal Commission staff's reliance on section 30231 of the California Coastal Act of 1976 in its November 4, 2019 addendum as the basis for recommending additional groundwater modeling, it is unclear whether Coastal Commission staff asserts, or has any factual basis for asserting, that the Project could potentially impact groundwater resources in a manner that would affect the coastal resources protected by that provision. The statute specifies the Coastal Commission shall maintain and, if feasible, restore the "biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate *to maintain optimum populations of marine organisms and for the protection of human health . . .*" (Pub. Resources Code, § 30231, italics added.)

Pure Water Monterey expansion project may proceed beyond its currently pending environmental review, but significant additional progress appears unlikely while the Project is still pending.

Furthermore, as the NOAA Fisheries Central Coast Branch Chief publicly commented before the Coastal Commission in March, there could be dire consequences for the steelhead and other public trust resources if a reliable and sustainable water supply allowing Cal-Am to terminate its unlawful diversions is not promptly developed. For all of these reasons, the State Water Board urges the Coastal Commission to consider whether it actually requires additional information or investigation regarding the Project, and to then promptly complete any additional work so it can issue a final decision on Cal-Am's application and appeal no later than is currently planned at the August 2020 meeting.

We appreciate your attention to these important issues and remain available to discuss any of this with you or your staff if further discussion would be helpful.³

Sincerely,



Eileen Sobeck, Executive Director
State Water Resources Control Board

cc: **[via email only]**

Alison Dettmer, Senior Deputy Director, Coastal Commission
Kate Huckelbridge, Deputy Director of Energy, Ocean Resources, & Federal Consistency, Coastal Commission
Tom Luster, Senior Environmental Scientist, Coastal Commission
Rich Svindland, President, California American Water
Layne Long, City Manager, City of Marina

³ These comments regard technical and legal matters that are within the State Water Board's purview and expertise. They should not be interpreted by the Coastal Commission or any other parties as support for or opposition to the Project, Pure Water Monterey expansion, or any other efforts that will permanently end Cal-Am's unauthorized diversion from Carmel River as soon as possible. The Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) also has permitting authority over the Project, and will apply subdivision (b) of section 13142.5 of the Water Code and the California Ocean Plan in the exercise of that authority. These comments may not necessarily reflect the positions of the Central Coast Water Board.

EXHIBIT J



United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

March 5, 2021

The Honorable Gavin Newsom
Governor
State of California
Sacramento, California 95814

Dear Governor Newsom:

In accordance with 7 CFR 759.5(a), I am designating 50 California counties as primary natural disaster areas due to a recent drought.

According to the U.S. Drought Monitor (see <http://droughtmonitor.unl.edu/>), these counties suffered from a drought intensity value during the growing season of 1) D2 Drought-Severe for 8 or more consecutive weeks or 2) D3 Drought-Extreme or D4 Drought-Exceptional.

In accordance with section 321(a) of the Consolidated Farm and Rural Development Act, additional areas of your state and adjacent states are named as contiguous disaster counties. Enclosed you will find documentation that provides a detailed list of all primary and contiguous counties impacted by this disaster.

A Secretarial disaster designation makes farm operators in primary counties and those counties contiguous to such primary counties eligible to be considered for certain assistance from the Farm Service Agency (FSA), provided eligibility requirements are met. This assistance includes FSA emergency loans. Farmers in eligible counties have 8 months from the date of a Secretarial disaster declaration to apply for emergency loans. FSA considers each emergency loan application on its own merits, taking into account the extent of production losses on the farm and the security and repayment ability of the operator.

Local FSA offices can provide affected farmers with further information.

Sincerely,

A handwritten signature in blue ink, reading "Tom J. Vilsack", is positioned above the printed name of the Secretary.

Thomas J. Vilsack
Secretary

Enclosure

Disaster Designation Areas for California and Contiguous States

Primary Counties:

California	(50)			
Alameda	Glenn	Marin	Riverside	Solano
Alpine	Humboldt	Mariposa	Sacramento	Sonoma
Amador	Imperial	Mendocino	San Bernardino	Stanislaus
Butte	Inyo	Merced	San Francisco	Sutter
Calaveras	Kern	Modoc	San Joaquin	Tehama
Colusa	Kings	Mono	San Mateo	Trinity
Contra Costa	Lake	Napa	Santa Clara	Tulare
Del Norte	Lassen	Nevada	Shasta	Tuolumne
El Dorado	Los Angeles	Placer	Sierra	Yolo
Fresno	Madera	Plumas	Siskiyou	Yuba

Contiguous Counties:

California	(8)		
Monterey	San Benito	San Luis Obispo	Santa Cruz
Orange	San Diego	Santa Barbara	Ventura

In addition, in accordance with section 321(a) of the Consolidated Farm and Rural Development Act, counties in adjacent states are named as contiguous disaster areas. Those states, counties, and numbers are:

Contiguous Counties in Adjacent States:

Arizona	(3)		
La Paz	Mohave	Yuma	
Nevada	(8)		
Clark	Esmeralda	Mineral	Washoe
Douglas	Lyon	Nye	Carson City
Oregon	(5)		
Curry	Josephine	Lake	
Jackson	Klamath		

EXHIBIT K

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

State of Emergency Proclamation

WHEREAS climate change is intensifying the impacts of droughts on our communities, environment and economy, and California must therefore improve drought resiliency and prepare to respond to more frequent, prolonged, and intense dry periods; and

WHEREAS much of the West is experiencing severe to exceptional drought and California is in a second consecutive year of dry conditions, resulting in drought or near-drought throughout many portions of the State; and

WHEREAS these drought conditions can result in degraded water quality, fallowing of productive farmland, setbacks to vulnerable and rural communities through job losses and longer-lasting recoveries, significant impacts to tribal, commercial, and recreational salmon fisheries, constraints on access to traditional lifeways, loss of aquatic and terrestrial biodiversity, and ecosystem impacts; and

WHEREAS drought conditions vary across the State and some watersheds, including the Russian River and Klamath Basin, are extremely dry and are facing substantial water supply and ecosystem challenges; and

WHEREAS it is necessary to expeditiously mitigate the effects of the drought conditions within the Russian River Watershed, located within Mendocino and Sonoma counties, to ensure the protection of health, safety, and the environment; and

WHEREAS experience in the last drought has demonstrated the value of preparing earlier for potential sustained dry conditions, the need to improve our monitoring and forecasting capabilities, and many other lessons that are captured in the Administration's *Report to the Legislature on the 2012-2016 Drought*; and

WHEREAS the State and its many partners have strengthened drought resilience since the last drought including state investments in water management systems, implementation of the Sustainable Groundwater Management Act, establishment of the Safe and Affordable Fund for Equity and Resilience Program, development of the Administration's *Water Resilience Portfolio*, and continued water conservation by Californians whose current statewide urban water use is 16% lower than at the beginning of the last drought; and

WHEREAS state agencies have been actively responding to current drought conditions and preparing for the possibility of a third dry year including through convenings of the interagency drought team, which was established at my direction, to organize, focus, and track changing conditions, coordinate state agency responses, and work closely with partners across the State; and

WHEREAS under the provisions of Government Code section 8558(b), I find that the conditions caused by the drought conditions, by reason of their magnitude, are or are likely to be beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to appropriately respond; and

WHEREAS under the provisions of Government Code section 8625(c), I find that local authority is inadequate to cope with the drought conditions; and

WHEREAS to protect public health and safety, it is critical the State take certain immediate actions without undue delay to prepare for and mitigate the effects of, the drought conditions within the Russian River Watershed, and under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this Proclamation would prevent, hinder, or delay the mitigation of the effects of the drought conditions of the Russian River Watershed, located within Mendocino and Sonoma counties.

NOW THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, section 8625, **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in Mendocino and Sonoma counties due to drought conditions in the Russian River Watershed.

IT IS HEREBY ORDERED THAT:

1. To further the success of California's water conservation efforts and increase our drought preparedness, state agencies shall partner with local water districts and utilities to make all Californians aware of drought, and encourage actions to reduce water usage by promoting the Department of Water Resources' Save Our Water campaign (<https://saveourwater.com>) and other water conservation programs.
2. To continue coordination with partners across the State for the potential of prolonged drought impacts, the Department of Water Resources, the State Water Resources Control Board (Water Board), the Department of Fish and Wildlife, and the Department of Food and Agriculture shall work with regional and local governments, including groundwater sustainability agencies, to identify watersheds, communities, public water systems, and ecosystems that may require coordinated state and local actions to address issues stemming from continued dry conditions, to ensure that we can respond to water shortages and protect people, natural resources and economic activity.
3. To continue partnership and coordination with Californian Native American tribes, state agencies shall engage in consultation, collaboration, and communication with California Native American tribes to assist them in necessary preparation and response to drought conditions on tribal lands and potential impacts to cultural and traditional resources within ancestral lands.
4. To prioritize drought response and preparedness resources, the Department of Water Resources, the Water Board, the Department of Fish and Wildlife and the Department of Food and Agriculture, in consultation with the Department of Finance, shall:
 - a. Accelerate funding for water supply enhancement, water conservation, or species conservation projects.
 - b. Identify unspent funds that can be repurposed to enable projects to address drought impacts to people, ecosystems, and economic activities.
 - c. Recommend additional financial support for water resilience infrastructure projects and actions for potential inclusion in the upcoming May Revision.

5. To increase resilience of our water supplies during drought conditions, the Department of Water Resources shall:
 - a. Work with counties to encourage reporting of household water shortages, such as dry residential wells, on the website the Department maintains for that purpose, to enable tracking of drought impacts.
 - b. Work with counties, and groundwater sustainability agencies as appropriate, to help ensure that well drillers submit required groundwater well logs for newly constructed and deepened wells in a timely manner.
 - c. Work with agricultural water suppliers and agricultural water users to provide technical assistance, including implementation of efficient water management practices and use of technology such as the California Irrigation Management Information System.
 - d. Work with urban and agricultural water suppliers to encourage timely submittal by water districts and public posting of urban water management and water shortage contingency plans and agricultural water management and drought plans.
 - e. Accelerate updating the land subsidence data it is providing to support implementation of the Sustainable Groundwater Management Act.
6. To increase resilience of our water systems during drought conditions, the Water Board shall:
 - a. Use its authority, provide technical assistance, and where feasible provide financial assistance, to support regular reporting of drinking water supply well levels and reservoir water levels where the Water Board determines that there is risk of supply failure because of lowering groundwater levels or reservoir levels that may fall below public water system intakes.
 - b. Prioritize the permitting of public water systems that anticipate the need to activate additional supply wells where water quality is a concern and treatment installation needs to proceed to relieve a system's potential supply concerns.
 - c. Provide annual water demand data, information on water right priority, and other communications on water availability on its website.
 - d. Identify watersheds where current diversion data is insufficient to evaluate supply impacts caused by dry conditions, and take actions to ensure prompt submittal of missing data in those watersheds.
7. To address the acutely dry conditions in the Russian River Watershed, the Water Board shall consider:
 - a. Modifying requirements for reservoir releases or diversion limitations in that watershed to ensure adequate, minimal water supplies for critical purposes.
 - b. Adopting emergency regulations to curtail water diversions when water is not available at water rights holders' priority of right or to protect releases of stored water.

For purposes of carrying out this directive, Public Resources Code, Division 13 (commencing with section 21000) and regulations adopted pursuant to that Division are suspended in the counties of Mendocino and Sonoma to the extent necessary to address the impacts of the drought in the Russian River Watershed. The Water Board shall identify the projects

eligible for the suspensions pursuant to this paragraph and maintain on its websites a list of the activities or approvals for which these provisions are suspended.

8. To ensure that equipment and services necessary for drought response in the Russian River Watershed can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to procurement, state contracts, and fleet assets, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended to the extent necessary to address the effects of the drought in the Russian River Watershed, located within Mendocino and Sonoma counties. Approval of the Department of Finance is required prior to the execution of any contract entered into pursuant to this provision.
9. To increase the resilience of our natural habitats to protect vulnerable species during drought conditions, the Department of Fish and Wildlife shall:
 - a. Evaluate and take actions to protect terrestrial and aquatic species and, wherever possible, work with water users and other parties on voluntary measures to protect species.
 - b. Work to improve State hatcheries and increase water use efficiency on State wildlife areas and ecological reserves to maintain habitat for vulnerable species.
 - c. Respond to human-wildlife interactions related to ongoing dry conditions and increase public messaging and awareness.
 - d. Work with commercial and recreational salmon fishing and tribal representatives to anticipate and develop strategies to mitigate and respond to salmon fishery impacts, with particular emphasis on addressing impacts to salmon fisheries in the Klamath Basin.
10. To support our agricultural economy and food security during drought conditions, the Department of Food and Agriculture shall:
 - a. Provide technical assistance to support conservation planning, on-farm water and energy conservation practices and technologies, including augmenting the State Water Efficiency and Enhancement Program.
 - b. Conduct an economic analysis of drought impacts to agriculture, including land use, jobs, and rural food economies, expanding on existing research done in the last drought to include thorough regional analysis especially in the Central Valley, and in the implementation of the Sustainable Groundwater Management Act and alternative land uses for fallowed land.
 - c. Maintain a web page with drought resources for farmers and ranchers, including the United States Department of Agriculture and other federal and state resources.
 - d. Work with federal agencies to assist Klamath Basin farmers and ranchers contending with reduced water supplies.
11. To ensure the potential impacts of drought on communities are anticipated and proactively addressed, the Department of Water Resources, in coordination with the Water Board, shall develop groundwater management principles and strategies to monitor, analyze, and minimize impacts to drinking water wells.
12. To provide critical information on the different drought conditions across the State, the Department of Water Resources, in consultation with the Department of Fish and Wildlife, the Department of Food and Agriculture,

and the Water Board, shall develop a California Drought Monitor by December 31, 2021, as recommended in the Administration's Report to the Legislature on the 2012-2016 Drought.

13. To prepare for potential salinity issues in the Delta, the Department of Water Resources, in consultation with the Water Board, the Department of Fish and Wildlife, the Delta Stewardship Council, and the Central Valley Flood Protection Board, shall initiate actions necessary to prepare for and address potential Delta salinity issues during prolonged drought conditions.

14. To prepare for potential impacts of drought conditions on species, the Water Board and the Department of Fish and Wildlife shall work with federal agency partners to manage temperature conditions for the preservation of fish in the Sacramento River downstream of Shasta Dam while balancing water supply needs.

This Proclamation is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this Proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 21st day of April 2021



GAVIN NEWSOM
Governor of California

ATTEST:

DR. SHIRLEY WEBER
Secretary of State

April 26, 2021

TO: Paul Sciuto and Alison Imamura

FROM: Barbara J. Schussman

RE: **Responses to 4/22/21 Letter from MCWD Regarding the Final SEIR for the Proposed Modifications to the PWM/ GWR Project**

This memorandum provides responses to comments provided by Remy, Moose & Manley on behalf of the Marina Coast Water District. The responses are based upon the evidence that is in the administrative record for the Proposed Modifications to the PWM Project.

Summary

MCWD's attorneys request that M1W modify the Proposed Modifications in two ways:

- Eliminate the 36" conveyance pipeline that would enable Cal-Am to deliver extracted water to Cal-Am's customers, or reduce the size of this pipeline to 24"; and
- Eliminate two of the four new extraction wells.

As MCWD's attorneys acknowledge, evidence in the record indicates that the proposed 36" conveyance pipeline would be needed to enable Cal-Am to deliver extracted water on peak demand days under a defined set of conditions. The information provided by MCWD's attorneys could be considered as competing facts and opinions differing from the facts and opinions that M1W has received from Cal-Am and Monterey Peninsula Water Management District (MPWMD) technical staff. **The M1W Board of Directors is entitled to weigh and balance this competing information. CEQA does not require that the Board eliminate or reduce the size of the 36" pipeline.**

MCWD's attorneys have not introduced evidence indicating that the environmental impacts of the Proposed Modifications would be substantially lessened if the Cal-Am pipeline were reduced from a 36" pipeline to a 24" pipeline or eliminated altogether. Construction and operation of the 36" pipeline would not add new significant impacts or substantially increase the severity of the impacts of the approved PWM/GWR Project. **Reducing the diameter of or eliminating the pipeline would not substantially reduce the Project's significant environmental effects.**

MCWD's attorneys also acknowledge that evidence in the record indicates that four extraction wells are needed. The SEIR contains a full analysis of the adverse environmental impacts associated with construction and operation of the extraction wells, and the substantial reduction in significant impacts that would be achieved if two of the four wells proposed by Cal-Am were eliminated from the Proposed Modifications. **The M1W Board of Directors is entitled to weigh the benefits of including four rather than two extraction wells against the adverse**

environmental effects of constructing extraction wells EW-3 and EW-4 to decide whether the benefits outweigh the adverse impacts.

Finally, MCWD's attorneys indicate in their bold-faced headings that elimination of the 36" pipeline and two of the four extraction wells would avoid potential growth inducing impacts. However, MCWD's attorneys offer no evidence or argument supporting these statements. The SEIR provides a conservative analysis of the potential for the Proposed Modifications to induce growth, based upon an assumption that the Expanded PWM Project could accommodate the same amount of growth as Cal-Am's Monterey Peninsula Water Supply Project (MPWSP).

More detailed responses are provided below.

Introduction

MCWD's attorneys confirm that MCWD fully supports M1W and MPWMD's objectives for the proposed PWM Expansion Project.

MCWD asks that M1W consult with MCWD regarding the Regional Dynamic Water Balance Mode Project that was approved at M1W's March 29, 2021 meeting.

MCWD requests changes and clarifications to the proposed CEQA findings and resolution for the Expanded PWM Project. "MCWD believes the Project approval resolutions must be modified to remove or reduce Cal-Am Distribution System elements that are unnecessary -- or at a minimum oversized -- to meet the Project's purpose and objectives."

Response: Responses to MCWD's requests for changes are provided below.

I. MCWD's Request to Reduce or Remove Cal Am's 36" Pipeline

MCWD's attorneys reiterate MCWD's prior comment that Cal-Am's 36" pipeline is sized at four times the capacity that is needed to convey water from the Expanded PWM Project, and that MCWD's existing product water conveyance pipeline would appear to have adequate capacity to accommodate the Expanded PWM Project flows.

Response. As MCWD's attorneys recognize, the Final SEIR includes a response to MCWD's prior comment, explaining that the Proposed Modifications were designed to accommodate peak day and total customer demand under a specified set of conditions.

MCWD's attorneys state "Including the pipeline in the Project would provide M1W's endorsement of Cal-Am passing on a significant unnecessary cost to its ratepayers, added to all of its necessary costs plus its guaranteed rate of return to shareholders, which is currently 7.52%."

Response: The 36" pipeline is included in the Supplemental EIR to ensure that all improvements that are reasonably likely to be needed to implement the Expanded PWM Project have been

identified, and the environmental impacts of constructing and operating those improvements have been fully disclosed and mitigated. MIW does not have the legal authority to determine whether costs can or should be passed along to Cal-Am's ratepayers, nor does MIW determine whether Cal-Am's facilities should be designed to meet peak demand under the specified set of conditions. Other agencies with approval authority over Cal-Am's facilities will decide whether and how the Cal-Am facilities should be implemented, and how costs will or will not be passed along to Cal-Am's ratepayers.

MCWD's attorneys reiterate MCWD's prior comments to the MPWMD Board regarding the volume of flows and system operations that MCWD's attorneys believe should be assumed when considering the need for the 36" pipeline.

Response: This is a technical issue. The MIW Board of Directors is entitled to weigh competing technical information. The question for the MIW Board of Directors is whether the 36" pipeline is reasonably likely to be needed to implement the Expanded PWM Project. If the answer to that question is yes, then the pipeline should be included in the project description, and the impacts of constructing and operating the pipeline should be revealed to the public (as has occurred through inclusion of the pipeline in the SEIR).

MCWD's attorneys state that there may be other solutions that are less expensive and would substantially lessen the environmental impacts of constructing and operating a 36" pipeline. MCWD's attorneys identify some options that would necessitate revisions to existing permits and other approvals.

Response: The SEIR concludes that construction and operation of the 36" pipeline would not result in any new or substantially more severe significant environmental impacts, compared to the impacts previously disclosed in the certified PWM/ GWR Project EIR. The SEIR revealed two new significant impacts: construction noise and the potential for growth inducement. The new construction noise impact would result from construction of Cal-Am's extraction wells, not from construction of the pipeline. The potential for growth inducement would result from the increased yield associated with the Expanded PWM Project, not from any specific project component. Elimination of the pipeline would not substantially lessen any of the Expanded PWM Project's significant environmental impacts.

MCWD's attorneys state that MCWD believes the 36" pipeline is not needed for the Expanded PWM Project but is instead proposed by Cal-Am to belatedly address deficiencies in the MPWSP. MCWD's attorneys further state that to the extent these facilities are needed to accommodate MPWSP desal water, the CPUC is the appropriate lead agency under CEQA.

Response: Please see prior responses to the assertion that the pipeline is not needed for the Expanded PWM Project. If this same 36" pipeline could be used in connection with a future desalination project, that fact would not change MIW's obligation to include the pipeline in the project description for the Expanded PWM Project. CEQA requires MIW to include all of the improvements that are reasonably likely to be needed to implement the Expanded PWM Project

in the SEIR for that project. MIW's prior analysis of the Monterey Pipeline in the certified PWM/GWR Project EIR provides a similar example of this principle. The Monterey Pipeline was included both in the MPWSP EIR and in the PWM/GWR Project EIR. MIW included that pipeline in the PWM/GWR Project EIR because it would be needed for distribution of water produced by the PWM/GWR Project regardless of whether the MPWSP was constructed and operated. Here too, the Board can find that evidence in the record indicates that the 36" pipeline would be needed to convey extracted water produced by the Expanded PWM Project regardless of whether the MPWSP is constructed and operated.

MCWD's attorneys state that a 24" pipeline would provide more capacity than Cal-Am needs to move water north and south at the same time.

Response: This is a technical issue. The MIW Board of Directors is entitled to weigh competing technical information. The question for the MIW Board of Directors is whether the 36" pipeline is reasonably likely to be needed to implement the Expanded PWM Project. If the answer to that question is yes, then the pipeline should be included in the project description, and the impacts of constructing and operating the pipeline should be revealed to the public (as has occurred through inclusion of the pipeline in the SEIR).

MCWD's attorneys ask that, if MIW approves the project with Cal-Am's new pipeline, it make clear in its findings that the SEIR only addresses mitigation and alternatives to Cal-Am's pipeline if the Expanded PWM Project is built. MCWD's attorneys state that under the currently proposed resolutions, Cal-Am can seek permits and build the pipeline even if it never enters into a water purchase agreement with MIW and the Expanded PWM Project is never built.

Response: The SEIR addresses construction and operation of the Expanded PWM Project. The draft resolutions do not authorize Cal-Am to construct or operate the 36" pipeline because MIW has no authority to authorize such construction and operation. Other agencies with approval authority would need to consider any proposal by Cal-Am to build this pipeline. Those agencies may choose to rely on the certified SEIR for the Proposed Modifications to the PWM/GWR Project in connection with those approvals; however, they will need to determine whether any application filed by Cal-Am differs from the description of the configuration and use of the 36" pipeline in MIW's certified SEIR and if so whether such differences would result in a new or substantially more severe impact.

MCWD's attorneys state that there are additional mitigation measures that must be required (and potential alternatives) if the pipeline is constructed for the MPWSP and the Expanded PWM Project is never built.

Response: The impacts of constructing the 36" pipeline have been disclosed in the SEIR. If the pipeline would be operated for the MPWSP or for any purpose other than for the Expanded PWM Project, then the agency considering an application to construct or operate the pipeline for such a use would need to determine whether the change in use would result in a new or

substantially more severe impact. MCWD's attorneys recognize that the Final SEIR acknowledges this principle in the responses to MCWD's comments. No revisions are needed.

II. MCWD's Request to Eliminate Extraction Wells EW-3 and EW-4

MCWD's attorneys reiterate their prior support for elimination of extraction wells EW-3 and EW-4. MCWD's attorneys state these wells are not needed for the Expanded PWM Project. MCWD's attorneys state that the additional extraction well expansion capacity is more than five times larger than the supply being added by the Expanded PWM Project. MCWD's attorneys state "Given that this alternative would greatly decrease the Project's significant and unavoidable noise impacts, there is insufficient evidence to support the proposed Statement of Overriding Considerations."

Response: The need for and benefits of extraction wells EW-3 and EW-4 is a technical issue. The M1W Board of Directors is entitled to weigh competing technical information.

The SEIR fully evaluates elimination of extraction wells EW-3 and EW-4 as a project alternative and discloses that elimination of these two wells would substantially reduce the significant adverse effects of the Proposed Modifications. The M1W Board of Directors is entitled to weigh the benefits of including four rather than two extraction wells in the project against the adverse environmental effects of constructing the extraction wells to decide whether the benefits outweigh the adverse environmental impacts.

MCWD's attorneys ask that, if M1W approves the project with Cal-Am's extraction wells EW-3 and EW-4, it make clear in its findings that the SEIR only addresses mitigation and alternatives to Cal-Am's extraction wells EW-3 and EW-4 if the Expanded PWM Project is built. MCWD's attorneys state that under the currently proposed resolutions, Cal-Am can seek permits and build all four extraction wells even if it never enters into a water purchase agreement with M1W and the Expanded PWM Project is never built.

Response: The SEIR addresses construction and operation of the Expanded PWM Project. The draft resolutions do not authorize Cal-Am to construct or operate the extraction wells because M1W has no authority to authorize such construction and operation. Other agencies with approval authority would need to consider any proposal by Cal-Am to build these extraction wells. Those agencies may choose to rely on the certified SEIR for the Proposed Modifications to the PWM/GWR Project in connection with those approvals; however, if they rely on this SEIR they will need to determine whether any application filed by Cal-Am differs from the description of the configuration and use of the extraction wells in M1W's certified SEIR and if so whether such differences would result in a new or substantially more severe impact.

III. MCWD's Proposed Changes to Draft Resolution 2021-05

MCWD's attorneys suggest language that could be used to approve the alternative studied in the SEIR rather than the Proposed Modifications if the M1W Board of Directors decides that extraction wells 3 and 4 should be eliminated from the Proposed Modifications.

Response: If the Board decides to eliminate extraction wells EW-3 and EW-4, the CEQA findings could be modified to use the language that MCWD's attorneys suggest. The M1W Board of Directors is entitled to weigh the benefits of including four rather than two extraction wells in the project against the adverse environmental effects of constructing the extraction wells to decide whether the benefits outweigh the adverse environmental impacts.

MCWD's attorneys suggest language that could be used to indicate that the M1W Board has determined that a 24" pipeline and only two of the four extraction wells are needed for Cal-Am to extract and deliver water from the Proposed Modifications on a seasonal basis, while at the same time implementing the ongoing Aquifer Storage and Recovery program and meeting maximum day demands during the summer months.

Response: If the Board decides to reduce the size of the pipeline, the CEQA findings could be modified to use the language that MCWD's attorneys suggest. The M1W Board of Directors is entitled to weigh competing technical information.

MCWD's attorneys suggest language indicating that the M1W Board expresses no opinion on whether CEQA review would be required to address alternatives or additional mitigation measures for the proposed Cal-Am Conveyance Facilities and Extraction Wells should Cal-Am not enter into a Water Purchase Agreement for PWM Expansion deliveries.

Response: CEQA does not require a lead agency to include findings indicating that the CEQA lead agency has no opinion as to a given topic.

April 26, 2021

TO: Paul Sciuto and Alison Imamura

FROM: Barbara J. Schussman

RE: **Responses to 4/23/21 Comments from Cal-Am Regarding April 26, 2021 Board of Directors Meeting, Agenda Item #7.B**

This memorandum provides responses to comments provided by Latham & Watkins on behalf of Cal-Am. The responses are based upon the evidence that is in the administrative record for the Proposed Modifications to the PWM Project.

Cal-Am's attorneys repeat their prior comments. These comments have been fully addressed in previous written responses; new responses to each of the comments in Attachment A to Cal-Am's attorneys' letter are not required by CEQA.

This memorandum briefly reiterates the responses to the key points raised in Cal-Am's attorneys' cover letter.

1. **Feasibility.** Cal-Am's attorneys express concerns about the feasibility of the Expanded PWM Project, and state that those concerns would be factored into negotiations over a water purchase agreement.

Response: Competing views as to the feasibility of the Expanded PWM Project have been presented to the MIW Board of Directors and can be considered by the Board in deciding whether or how to approve the Expanded PWM Project. It is not the role of the SEIR to determine each of the financial, indemnity and guarantee terms of a potential water purchase agreement.

2. **Yield.** Cal-Am's attorneys state that even if expansion product water is part of Cal-Am's water supply portfolio, Cal-Am still will need additional water supplies to serve projected Monterey Peninsula demand.

Response: Approval of the Expanded PWM Project would not preclude Cal-Am from pursuing approvals from other agencies for additional water supplies. The SEIR explains that if Cal-Am were to operate the Monterey Peninsula Water Supply Project (MPWSP) as contemplated by the EIR for that project, there would be no need to also operate the Expanded PWM Project to provide the same water for Cal-Am's customers. Accordingly, the SEIR explains that these two projects are not assumed to operate simultaneously. If Cal-Am were to propose a different or modified project to augment its water supplies, any environmental analysis for such a different or modified project would need to consider the combined effects of operating the Expanded PWM Project and that newly proposed project. CEQA does not require MIW to speculate about the impacts of future water supply projects that have not been proposed for approval.

3. **Alternatives.** Cal-Am's attorneys state that the SEIR fails to evaluate the Expanded PWM Project as an alternative to the MPSWP.

Response: The question under CEQA is not whether the Expanded PWM Project is an alternative to the MPSWP; the MIW Board of Directors is not considering whether or how to approve the MPSWP. The question under CEQA is whether MIW must analyze the MPSWP as an alternative to the Expanded PWM Project. CEQA would require MIW to analyze the MPSWP as an alternative to the Expanded PWM Project if the MPSWP would be capable of achieving most of the objectives of the Expanded PWM Project and the MPSWP would substantially lessen one or more significant effects of the Expanded PWM Project. Here, logic supports the SEIR's determination that the MPSWP would not accomplish the objective of serving as a back-up to the MPSWP. Further, the SEIR explains why the MPSWP would not substantially lessen any of the significant effects of the Proposed Modifications to the PWM/PWR Project. To the contrary, evidence in the record indicates that the MPSWP would result in greater adverse environmental impacts compared to the Expanded PWM Project. For these reasons, CEQA does not require MIW to analyze the MPSWP as an alternative to the Expanded PWM Project.

4. **Cumulative Impacts.** Cal-Am's attorneys state that the expansion project should be analyzed as an addition or supplement to the MPSWP.

Response: The SEIR includes an analysis of the ways that the impacts of constructing and operating the MPSWP could combine with the impacts of constructing and operating the Expanded PWM Project. The SEIR identifies construction activities that could overlap if both projects are undertaken, and reveals the combined impacts associated with these potential overlapping construction activities. The SEIR does not identify combined impacts of operating the Expanded PWM Project and the MPSWP simultaneously because simultaneous operation would be speculative for the reasons provided in previous responses to comments.

5. **Evidence.** Cal-Am's attorneys state that the SEIR's supply and demand analysis is inadequate because the SEIR relies upon a memorandum prepared by Dave Stoldt, General Manager of the Monterey Peninsula Water Management District. Cal-Am's attorneys state that Mr. Stoldt is not a licensed engineer, that his opinions are biased, and that his opinion is outside his area of expertise.

Response: The SEIR's supply and demand analyses are based upon several pieces of information including the memorandum prepared and approved by the MPWMD. Prior to the MPWMD Board's approval of the final memorandum, MPWMD staff produced multiple drafts all of which were provided to the public for comment. Each draft addressed stakeholders' comments. Mr. Stoldt's qualifications are provided in the administrative record. CEQA does not require that an individual possess an engineering license to be an expert in the field of water supply and demand. The MIW Board of Directors is entitled to weigh the evidence in the record to determine whether Mr. Stoldt is an expert in his field. CEQA also does not require that an agency eliminate evidence produced by a project proponent.

6. **Source Water.** Cal-Am's attorneys disagree with the SEIR's presentation of source water availability and point to evidence submitted by experts retained by Cal-Am.

Response: The information provided by Cal-Am's attorneys could be considered as competing facts and opinions that differ from the facts and opinions that MIW has received from MIW's technical professionals and MPWMD's technical professionals. The MIW Board of Directors is entitled to weigh and balance this competing information and decide whether substantial evidence supports the SEIR's water supply and demand analysis. In any event, Cal-Am's attorneys have not demonstrated that their source water analysis would change the SEIR's conclusions regarding the significant impacts of the Expanded PWM Project.