CHAPTER 1 INTRODUCTION TO THE EIR

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1.1 PURPOSE OF THE EIR

The Monterey Regional Water Pollution Control Agency (MRWPCA) has prepared this Draft Environmental Impact Report (DEIR) to provide the public and responsible and trustee agencies with information on the potential environmental effects of implementation of the Pure Water Monterey Groundwater Replenishment Project (GWR Project or Proposed Project) on the local and regional environment. The GWR Project would provide purified recycled water for recharge of a groundwater basin that serves as drinking water supply, and recycled water to augment the existing Castroville Seawater Intrusion Project's crop irrigation supply. The project is jointly sponsored by the MRWPCA and the Monterey Peninsula Water Management District (Water Management District), and is being developed in coordination with the City of Salinas, the City of Monterey, the Marina Coast Water District, and the Monterey County Water Resources Agency. An overview of the project is provided below in **Section 1.2**, **Proposed Project Overview** and a full description of the project is presented in **Chapter 2**, **Project Description** of this document.

This EIR has been prepared 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 section 15000. As stated in the CEQA Guidelines section 15002, the basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Pursuant to State CEQA Guidelines section 15121, an EIR is an informational document which will inform public agency decision-makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.

While the information in the EIR does not control the ultimate decision on the project, the agency must consider the information in the EIR and respond to each significant effect identified in the EIR by making findings at the time of project approval as further explained below in **Section 1.4, Project Approval and Permitting Process**.

The focus of the environmental review process is upon significant environmental effects. As defined in the CEQA Guidelines, a "significant effect on the environment" is:

> ...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether a physical change is significant.

CEQA Guidelines section 15064(e) further indicates that economic and social changes resulting from a project shall not be treated as significant effects on the environment, although they may be used to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project.

1.2 PROPOSED PROJECT OVERVIEW

The Pure Water Monterey Groundwater Replenishment Project is a water supply project that would serve northern Monterey County. The project would provide: 1) purified recycled water for recharge of a groundwater basin that serves as drinking water supply; and 2) recycled water to augment the existing Castroville Seawater Intrusion Project's crop irrigation supply.

- ***Replenishment of the Seaside Groundwater Basin.*** The project would enable California American Water Company (CalAm) to reduce its diversions from the Carmel River system by up to 3,500 acre-feet per year by injecting the same amount of purified recycled water into the Seaside Basin. The purified recycled water would be produced at a new facility at the MRWPCA Regional Wastewater Treatment Plant (Regional Treatment Plant) and would be conveyed to and injected into the Seaside Groundwater Basin via a new pipeline and new well facilities. The injected water would then mix with the existing groundwater and be stored for future urban use by CalAm, thus enabling a reduction in Carmel River system diversions by the same amount.
- ***Additional recycled water for agricultural irrigation in northern Salinas Valley.*** An existing water recycling facility at the Regional Treatment Plant (the Salinas Valley Reclamation Plant) would be provided additional source waters in order to provide additional recycled water for use in the Castroville Seawater Intrusion Project's agricultural irrigation system. It is anticipated that in normal and wet years approximately 4,500 to 4,750 acre-feet per year of additional recycled water supply could be created for agricultural irrigation purposes. In drought conditions, the project could provide up to 5,900 acre feet per year for crop irrigation.

The project would also include a drought reserve component to support use of the new supply for crop irrigation during dry years. The project would provide an additional 200 acre-feet per year of purified recycled water that would be injected in the Seaside Basin in wet

and normal years for up to five consecutive years. This would result in a "banked" drought reserve totaling up to 1,000 acre feet. During dry years, the project would provide less than 3,500 acre feet of water to the Seaside Basin; however, CalAm would be able to extract the banked water to make up the difference to its supplies, such that its extractions and deliveries would not fall below 3,500 acre-feet per year. The source waters that are not sent to the advanced treatment facility during dry years would be sent to the Salinas Valley Reclamation Plant to increase supplies for the Castroville Seawater Intrusion Project.

The Proposed Project components include: conveyance of five potential types of source water to the Regional Treatment Plant north of Marina for treatment; a new Advanced Treatment (AWT) Facility and other improvements to the Regional Treatment Plant; treated water conveyance system, including pipelines and booster pump stations; groundwater injection wells; and potable water distribution system improvements. Construction of the project is anticipated to require approximately 18 months, plus three months of testing and start-up. MRWPCA is evaluating the use of alternative construction approaches, such as design-build, to expedite the construction schedule.

The new source waters would supplement the existing incoming wastewater flows, and would include the following: 1) water from the City of Salinas agricultural wash water system, 2) stormwater flows from the southern part of Salinas and the Lake El Estero facility in Monterey, 3) surface water and agricultural tile drain water that is captured in the Reclamation Ditch and Tembladero Slough, and 4) surface water and agricultural tile drain water that flows in the Blanco Drain. Most of these new source waters would be combined within the existing wastewater collection system before arriving at the Regional Treatment Plant; water from Blanco Drain would be conveyed on its own directly to the Regional Treatment Plant.

The Pure Water Monterey Groundwater Replenishment Project would require modifications to existing facilities and construction of new physical facilities, briefly listed below.

- ***Source water diversion and storage.*** New facilities would be required to divert and convey the new source waters through the existing municipal wastewater collection system and to the Regional Treatment Plant.
- ***Treatment facilities at the Regional Treatment Plant.*** A new advanced water treatment facility would be constructed at the Regional Treatment Plant site. This facility would include 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, a pump station, and a brine and wastewater mixing facility. There would also be modifications to the existing Salinas Valley Reclamation Plant to optimize and enhance the delivery of recycled water to growers
- ***Product water conveyance.*** A new pipeline, a pump station and appurtenant facilities would be constructed to transport the purified recycled (product) water from the Regional Treatment Plant to the Seaside Groundwater Basin for injection.
- ***Injection well facilities.*** The injection facilities would include new wells (in the shallow and deep aquifers), back-flush facilities, pipelines, electricity/power distribution facilities, and electrical/motor control buildings.

- ***Distribution of groundwater from Seaside Basin.*** Two new CalAm water distribution system pipelines would be needed to deliver the extracted groundwater to CalAm customers.

1.3 CEQA PROCESS

1.3.1 Notice of Preparation and Scoping Meeting

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the MRWPCA, as Lead Agency, prepared a Notice of Preparation (NOP) for this EIR (see **Appendix A**). The NOP was circulated to local, state, and federal agencies and other interested parties from May 30to July 2, 2013 for a 30-day review period. A supplement to the NOP was prepared and circulated December 9, 2014 through January 8, 2015 for a 30-day review period to reflect updates to the Proposed Project that had occurred since the original NOP was issued.

A public scoping meeting was held on Thursday, June 18, 2013 from 6:00 to 8:00 PM at the Oldemeyer Center located at 986 Hilby Avenue, Seaside, CA 93955 to present the proposed project to the public and agencies and to solicit input as to the scope and content of the EIR. Public notices were placed in local newspapers informing the general public of the scoping meetings. Appendix A provides a summary of all written comments received in response to the initial and supplemental NOPs and oral comments received at the public Scoping Meeting.

1.3.2 Draft EIR

The Draft EIR focuses on the potentially significant environmental effects of the project. Significance criteria (indicating what constitutes a significant impact) have been developed for each environmental issue analyzed in this EIR consistent with previous environmental impact reports and updated agency guidance and professional standards, and are defined at the beginning of each impact analysis section. Impacts are categorized as follows:

1. Significant, unavoidable
2. Significant, but can be mitigated to a less-than-significant level
3. Less than significant (mitigation is not required under CEQA but may be recommended)
4. No impact

The Draft EIR will be published and circulated for review and comment by public agencies, members of the public and other interested parties and organizations for a 45-day review period. The public review period will begin on Wednesday, April 22nd and end on Friday, June 5th, 2015 at 5:00 PM. Written comments on the Draft EIR may be submitted to the MRWPCA at: MRWPCA, ATTN: Bob Holden, 5 Harris Court, Building D, Monterey, CA 93940, or emailed to gwr@mrwpca.com. During the 45-day Draft EIR review period, MRWPCA will hold two noticed public meetings to provide information and answer questions about the Proposed Project and the EIR.

1.3.3 Final EIR

Written comments received in response to the Draft EIR will be addressed in a Response to Comments document that, together with the Draft EIR, will constitute the Final EIR. The Final EIR will include written responses to any significant environmental issues raised in comments received during the public review period in accordance with the State CEQA Guidelines section 15088. The Final EIR will be distributed in accordance with requirements of the State CEQA Guidelines. MRWPCA will hold a public hearing to consider EIR certification. Prior to taking action on the project, the MRWPCA Board must certify that it has reviewed and considered the information in the EIR, that the EIR has been completed in conformity with the requirements of CEQA, and that the document reflects the Agency's independent judgment pursuant to the State CEQA Guidelines Section 15090. Following EIR certification, the MRWPCA may proceed with consideration of project approval actions.

1.3.4 Mitigation Monitoring and Reporting

CEQA requires lead agencies to adopt a Mitigation Monitoring and Reporting Program for mitigation measures the agency has adopted or made a condition of project approval in order to reduce or avoid significant effects on the environment. A Mitigation Monitoring and Reporting Program will be developed at the time MRWPCA makes findings on the project.

1.3.5 CEQA-Plus

The Proposed Project may be financed in part by a Clean Water State Revolving Fund (CWSRF or SRF) Loan, administered by the State Water Resources Control Board (SWRCB), Division of Financial Assistance. The CWSRF Program is partially funded by the U.S. Environmental Protection Agency, and is subject to federal environmental regulations. All applicants seeking CWSRF financing must comply with CEQA and provide sufficient information so that the SWRCB can document compliance with federal environmental laws. The SWRCB calls this federal compliance "CEQA-Plus." Therefore, this Draft EIR has been prepared to meet the CEQA-Plus requirements in order to be eligible for CWSRF loan funds.

1.4 PROJECT APPROVAL AND PERMITTING PROCESS

Subsequent to certification of the EIR, MRWPCA will act on the proposed project. It is anticipated that EIR certification and action on the project will be scheduled for the same public hearing. CEQA requires that a lead agency shall neither approve nor carry out a project as proposed unless the significant environmental effects have been reduced to an acceptable level (CEQA Sections 15091 and 15092) or the project objectives outweigh the unavoidable significant impacts (requiring the Lead Agency to make a Statement of Overriding Considerations) (CEQA Section 15093). An acceptable level is defined as eliminating, avoiding, or substantially lessening the significant effects.

Pursuant to sections 21002, 21002.1 and 21081 of CEQA and sections 15091 and 15093 of the state CEQA Guidelines, no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant effects unless one or more findings are made:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects on the environment.
2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been or can and should be, adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

Following the above actions, MRWPCA would proceed with implementation of the project. Implementation would require MRWPCA to secure permits and approvals from several local, regional, state, and federal agencies. These potential permits and approvals are presented within **Chapter 2, Project Description**.

1.5 ORGANIZATION OF THE DRAFT EIR

This Draft EIR includes the following:

Summary – This section summarizes the contents of the Draft EIR.

Chapter 1 – Introduction. This section describes the EIR process and organization of this document.

Chapter 2 – Project Description. This section provides an overview of the project, describes the need for and objectives of the project, and provides detail on the characteristics of the GWR Project.

Chapter 3 – Water Quality Statutory and Regulatory Compliance Overview. This section provides an overview of pertinent information related to the following:

(1) the status of recycled water regulations pertaining to groundwater replenishment;

(2) studies of other similar projects that have assessed the effects of using recycled water for groundwater replenishment on groundwater quality and public health;

(3) studies that have been specifically conducted for the project related to the treatment system design and performance;

(4) studies that have been specifically conducted for the project regarding protection of groundwater quality and quantity;

(5) Proposed Project compliance with applicable statutes, policies, and regulations;

(6) Proposed Project effects on groundwater; and

(7) the relevant information and conclusions for the EIR groundwater and other relevant water quality analyses.

Chapter 4 – Environmental Setting, Impacts and Mitigation Measures. This chapter presents a description of the physical and regulatory setting of the project by environmental issue area (see issue topics below), the significance criteria, including thresholds of significance, an analysis of the significance of impacts, and recommended mitigation measures to reduce any significant impacts. The following resources topics are provided in the Sections identified below:

- Aesthetics (**Section 4.2**)
- Air Quality and Greenhouse Gas (**Section 4.3**)
- Biological Resources: Fisheries (**Section 4.4**)
- Biological Resources: Terrestrial (**Section 4.5**)
- Cultural and Paleontological Resources (**Section 4.6**)
- Energy and Mineral Resources (**Section 4.7**)
- Geology, Soils, and Seismicity (**Section 4.8**)
- Hazards and Hazardous Materials (**Section 4.9**)
- Hydrology/Water Quality: Groundwater (**Section 4.10**)
- Hydrology/Water Quality: Surface Water (**Section 4.11**)
- Land Use, Agriculture, and Forest Resources (**Section 4.12**)
- Marine Biological Resources (**Section 4.13**)
- Noise and Vibration (**Section 4.14**)
- Population and Housing (**Section 4.15**)
- Public Services, Recreation, and Utilities (**Section 4.16**)
- Traffic and Transportation (**Section 4.17**)
- Water Supply and Wastewater Systems (**Section 4.18**)

Each environmental resource section includes a discussion of the environmental setting, applicable regulations pertaining to the resource area, impact assessment, and mitigation measures where applicable. Each section of Chapter 4 contains the following elements:

- Introduction
- Environmental Setting
- Regulatory Framework.
- Impacts and Mitigation Measures (including subsections for construction, operational, and cumulative analyses)
- References

Chapter 5 – Growth and Irreversible Commitment of Resources

Chapter 6 – Alternatives to the Proposed Project. This chapter presents an overview of the alternatives to the proposed project, including alternatives screening and selection, and alternatives considered, but eliminated from further review. The section also provides a qualitative environmental impact analysis of the alternatives considered.

Chapter 7 – Report Preparers

APPENDICES

Appendix A: Scoping Report for the Pure Water Monterey Groundwater Replenishment Project Environmental Impact Report

Appendix B: Source Water Assumptions Memorandum

Appendix C: Source Water Rights White Paper

Appendix D: Pure Water Monterey Groundwater Replenishment Project Water Quality Statutory and Regulatory Compliance Technical Report

Appendix E: Air Quality and Greenhouse Gas Technical Analyses

Appendix F: Memorandum Regarding Steelhead Habitat and Passage Effects Assessment: Salinas River

Appendix G: Fisheries Impact Assessments: Reclamation Ditch/Tembladero Slough Diversions

Appendix H: Supporting Information for the Biological Resources: Terrestrial Section

Appendix I: Delineation of Potential Jurisdictional Wetlands and Other Waters Under Section 404 of the Clean Water Act and the California Coastal Act

Appendix J: Cultural Resources Survey for the Proposed Monterey Groundwater Replenishment Project, Northern Monterey County, California

Appendix K: Preliminary Geotechnical Evaluation Groundwater Replenishment Project EIR Monterey County, California

Appendix L: Recharge Impacts Assessment Report for the Pure Water Monterey Groundwater Replenishment Project

Appendix M: Memorandum Regarding GWR Project EIR - Cumulative Projects Modeling Results for Seaside Groundwater Basin

Appendix N: Memorandum Regarding Pure Water Monterey Groundwater Replenishment Project - Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River

Appendix O: Salinas River Inflow Impacts Report

Appendix P: Reclamation Ditch Yield Study

Appendix Q: Blanco Drain Yield Study

Appendix R: Groundwater Replenishment Project Urban Runoff Capture at Lake El Estero

Appendix S: Memorandum Regarding Predicted Impact on Farming from Use of Recycled Water with Higher Salinity

Appendix T: MRWPCA GWR Discharge Dilution Analysis

Appendix U: Ocean Plan Compliance Assessment for the Pure Water Monterey Groundwater Replenishment Project

Appendix V: Ocean Plan Compliance Assessment for the Monterey Peninsula Water Supply Project and Project Variant

Appendix W: Pure Water Monterey Groundwater Replenishment Project Noise Study Report

Appendix X: Regional Treatment Plant Wastewater Flow Projection Report

Appendix Y: Overview of Combined MPWSP with 6.4-mgd Desalination Plant and GWR Project

Appendix Z: Alternatives to CalAm Distribution System: Monterey and Transfer Pipelines

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Source: DD&A, 2014

Regional Project Area

April 2015

Pure Water Monterey GWR Project
Draft EIR

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