UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

WIFIA PROGRAMMATIC ENVIRONMENTAL ASSESSMENT ADEQUACY MEMORANDUM

In accordance with the Council of Environmental Quality's (CEQ) regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (40 CFR Part 1500), and the U.S. Environmental Protection Agency's (EPA) procedures for implementing the National Environmental Policy Act (NEPA) (40 CFR Part 6), EPA has completed an environmental review of the following proposed action:

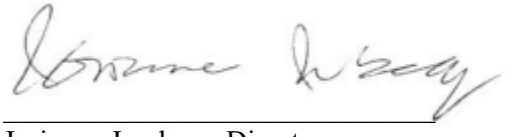
Issuance of Water Infrastructure Finance and Innovation Act (WIFIA) Program Credit Assistance to Monterey One Water Pure Water Monterey Groundwater Replenishment Project

EPA developed a Programmatic Environmental Assessment (PEA) to analyze the potential environmental impacts related to the issuance of credit assistance under the WIFIA program. The proposed federal action under consideration in the PEA was the approval or denial of WIFIA applications by either providing or not providing WIFIA credit assistance. The PEA evaluated the effects of design, construction, operation, and maintenance for a range of types of water and wastewater infrastructure projects that are eligible for WIFIA credit assistance. EPA has determined that the above referenced project falls under one of the project types assessed in the PEA.

The prospective borrower has completed the WIFIA Programmatic Environmental Assessment's (PEA) Environmental Questionnaire and provided supplemental information to the WIFIA program about the project and its potential environmental effects. In carrying out its responsibilities under NEPA, EPA has taken the following actions:

- Reviewed the PEA Environmental Questionnaire and supplemental information submitted by the prospective borrower or directly obtained by EPA;
- Determined the adequacy of the information available for completing the environmental review under NEPA and cross-cutting authorities;
- Assessed site-specific environmental impacts of the above referenced WIFIA project;
- Determined that the reasonably foreseeable environmental effects are within the scope or context of the PEA.

EPA has determined that no significant environmental impacts are anticipated from the issuance of WIFIA credit assistance to the applicant, and the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment, making the preparation of an Environmental Impact Statement (EIS) unnecessary. Based on the review documented above, I conclude that this proposal conforms to the WIFIA PEA and associated finding of no significant impact (FONSI), and that the documentation fully covers the proposed action, and constitutes EPA's compliance with the requirements of the NEPA.



October 13, 2022

Jorianne Jernberg, Director
WIFIA Management Division
Office of Wastewater Management

Date

Enclosures
Completed PEA Environmental Questionnaire (and supporting documentation)
Completed Applicant Verification Memorandum (and supporting documentation)

ENVIRONMENTAL REVIEW VERIFICATION

From: Alaina McCurdy, WIFIA Program
To: Paul A. Sciuto, General Manager, Monterey One Water
Cc: Alison Imamura, Principal Engineer, Monterey One Water
Mike McCullough, Director of External Affairs, Monterey One Water
Subject: NEPA finding and Federal Cross-Cutting Authorities Review for Monterey One Water Pure Water Monterey Groundwater Replenishment Project (19115CA)
Date: 08/30/22

Each proposed WIFIA project must be assessed for its impact on the environment under the guidelines set forth by the National Environmental Policy Act of 1969 (NEPA). EPA will not issue a term sheet or obligate funds for a project until a final agency decision has been issued, such as a Categorical Exclusion (CATEX), Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI), or an Environmental Impact Statement (EIS) and a Record of Decision (ROD). Additionally, EPA must consider the impacts that individual actions may have on particular cross-cutter resources and such considerations should be documented as part of the agency's decision-making process.

The prospective borrower has provided information to the WIFIA program about the project and its potential environmental effects. In carrying out its responsibilities, EPA has conducted the NEPA and cross-cutter review and taken the following actions:

- Reviewed the information submitted by the prospective borrower or directly obtained by EPA.
- Determined the adequacy of the information available for making a decision on the appropriate level of environmental review under NEPA and cross-cutting authorities.
- Completed the NEPA process through preparation of the appropriate decision-making document such as a CATEX determination, FONSI, or ROD.
- Documented compliance with cross-cutters in a Federal Cross-Cutting Authorities Review Memorandum.

The enclosed attachments to this memorandum document EPA's NEPA and cross-cutter review. EPA seeks verification on the completeness and correctness of the information provided. After reviewing the attached documents to verify that the information provided is accurate and complete, please sign and return this form to mccurdy.alaina@epa.gov. The signatory on this form must match the signatory in the WIFIA application.

I hereby verify that the information contained in the attached documents is accurate and complete to the best of my knowledge, and that the documents describe the complete project to be funded by the WIFIA loan. I understand that EPA is relying on the attached documents to support its decision.

Signature: _____ *Name of signee:* *Paul A. Sciuto*

Position and Agency/Organization: *General Manager, Monterey One Water* *Date:* *9-28-22*

Attached Documentation:

- Draft Federal Cross-Cutting Authorities Review Memorandum (and supporting documentation)
- Draft NEPA decision-making document (and supporting documentation)

FEDERAL CROSS-CUTTING AUTHORITIES REVIEW MEMORANDUM

From: Alaina McCurdy, WIFIA Program
To: Record
Subject: Federal Cross-Cutting Authorities Review for Monterey One Water Expanded Pure Water Monterey (PWM) Project (Expanded PWM Project) (WIFIA ID 19115CA)
Date: October 13, 2022

This memorandum summarizes the WIFIA Engineering Team's evaluation of the applicability of federal environmental cross-cutting authorities, the impacts from the project, the results of coordination and consultations with other agencies, and documents the review process.

PROJECT DESCRIPTION:

The WIFIA loan includes the base PWM/Groundwater Replenishment (GWR) Project, which is constructed and operational. In addition to the base PWM/GWR Project, the following additional components would be constructed and operated if the WIFIA loan or alternative financing is approved.

Advanced Water Purification Facility (AWPF) Expansion Component. The changes to the PWM/GWR Project to create the Expanded PWM Project would expand the AWPF 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 acre-feet per year (AFY) (for a total average yield of 5,750 AFY). Modifications would include installation of additional treatment and pumping equipment, chemical storage, pipelines, and facility appurtenances within the 3.5-acre existing building area. No new ground disturbance nor changes to the AWPF buildings or overhanging canopies are proposed as part of the Expanded PWM Project. All ground disturbance and construction of structures occurred during construction of the base project in 2018 to 2019. Ground disturbance, concrete work, and building/canopy construction, including the depth and heights of construction and permanent facilities, are not being modified for the Expanded PWM Project.

Injection Well Facilities Phase 4 (incl. Conveyance Facilities). The changes to implement the Expanded PWM Project would include construction and operation of additional product water conveyance facilities, specifically, a new product water conveyance pipeline and appurtenances extending from the existing Blackhorse Reservoir to an Expanded Injection Well Area. The southern portion of the pipeline would be located within the existing paved area of Eucalyptus Road. The Expanded Injection Well area will include construction and operation of additional Injection Well facilities (including two deep injection wells, electrical and mechanical equipment), additional monitoring well, and an additional backflush pipelines and percolation basin.

PROJECT LOCATION:

The new construction for the Expanded PWM Project is located in northern Monterey County, including within unincorporated parts of the county adjacent to the City of Seaside and within the City of Seaside

itself. The base Project components that are already constructed and operating are located within unincorporated areas of Monterey County and within the cities of Marina, Seaside, and Salinas.

1. ENVIRONMENTAL JUSTICE EXECUTIVE ORDERS NO.12898 AND 14008

PROJECT COMPONENT/ DEMOGRAPHIC UNIT	PEOPLE OF COLOR (%)	LOW-INCOME (%)	COMMUNITY WITH POTENTIAL EJ CONCERNS
CALIFORNIA	62%	33%	
Monterey County	70%	38%	
City: Seaside	69	36	Y
City: Marina	64	36	Y
City: Salinas	87	42	Y
Advanced Water Purification Facility (Base and Expansion Project)/ **060530143021**	55	32	Y
Blanco Drain (Base Project)/ **060530103061**	44	35	N
Injection Well Facilities and Expansion Pipeline (Base and Expansion Project)/ **060530141073**	57	33	Y
Reclamation Ditch Diversion (Base Project)/ **060530018011**	81	54	Y

The project area occurs across the cities of Marina and Salinas (base Project components only) and Seaside (base Project and expansion Project). Each of these cities contains people of color greater than 50 percent and may be considered a community with potential environmental justice concern. The project area contains three blockgroups with minority populations of greater than 50 percent. One project area blockgroups has low-income populations meaningfully greater than the state or county and may be considered communities with potential environmental justice concerns. Only the blockgroup containing the Blanco Drain (base project) is not considered to be a community with potential environmental justice concerns. Therefore, the study area does contain populations with environmental justice concerns. The project does not appear to be in or cause impacts to Indian country.

The project will result in temporary construction related impacts, generating noise, dust and construction related traffic impacts. Best management practices are being implemented to reduce construction related impacts to communities. The project provides benefits to the greater community by diverting and reusing the urban stormwater runoff as source water for the PWM Project, it will assist in lowering water levels in and around urban and productive agriculture areas threatened by flood. The expansion of the PWM Project will help further prepare the region for the likelihood of future drought conditions. The PWM Project also helps protect the potable water supply for the city of Salinas by slowing seawater intrusion. Project will further improve the water quality in both the Seaside Groundwater Basin and the Salinas Valley Groundwater Basin, as well as in the lower Salinas River and Carmel River.

Implementation of the project would not result in disproportionately high and adverse impacts on minority and low-income populations.

Supporting Documentation:

Attachment A: EPA EJ Screen Reports

2. ENDANGERED SPECIES ACT (16 U.S.C. §§ 1531–1599)

The U.S Fish and Wildlife Service (USFWS) issued a Biological Opinion for the base or original PWM Project on December 20, 2016 (hereafter, referred to as the PWM BioOp). The Expanded PWM Project required that the USFWS review the project changes and the BioOp and to amend the BioOp, if needed. EPA concludes that the Expanded PWM Project may adversely affect the species listed; however, the existing Biological Opinion and its conclusions and avoidance and minimization measures will still apply to the components that have changed for the Expanded Project, such that affects are addressed and the project is not likely to jeopardize the continued existence of the Monterey spineflower.

On March 8, 2022, EPA reinitiated formal consultation with the USFWS and provided a biological assessment. On June 15, 2022, EPA provided an updated biological assessment to USFWS. EPA has determined the Project is **likely to adversely affect** Monterey spineflower, and **may affect, but is not likely to adversely affect** Monterey gilia. On August 17, 2022, USFWS responded to EPA's reinitiation request with updated sections of the Biological Opinion. USFWS concurred with EPA's determination for the Monterey gila. USFWS stated that they do not expect that the proposed action would substantially affect recovery of the Monterey spineflower; at worst, the project could result in the disturbance or loss of approximately 0.2 acre of occupied habitat. These small effects would be reduced by implementation of a rare plant restoration plan that would compensate for impacts at a 1:1 ratio. The conclusion from the 2016 was unchanged in the 2022 update - the project is not likely to jeopardize the continued existence of the Monterey spineflower. Reporting requirements are outlined in the updated Biological Opinion that EPA must follow up on after the closing of the WIFIA loan.

No National Marine Fisheries Service listed species occur within the project area.

Supporting Documentation:

Attachment B: March 2022 letter to FWS

Attachment C: Biological Assessment

Attachment D: Revised Biological Assessment

Attachment E: June 2022 letter to FWS

Attachment F: Updated Biological Opinion Letter, August 2022

3. BALD AND GOLDEN EAGLE PROTECTION ACT (16 U.S.C. §§ 668-668C)

The proposed activity does not involve capture, transport, exhibition, collection, control or disturbance of eagles or eagle parts, nests or eggs. Additionally, no construction is expected to occur in close proximity to eagle nests; therefore, the regulations and requirements of this act do not apply.

4. FISH AND WILDLIFE COORDINATION ACT (16 U.S.C. § 661 ET SEQ.)

The Project would not control or modify surface waters; therefore, the requirements and regulations of this act do not apply.

5. MARINE MAMMAL PROTECTION ACT (16 U.S.C. §§ 1361-1407)

The Project will not affect marine mammals; therefore, the regulations and requirements of this act do not apply.

6. NATIONAL HISTORIC PRESERVATION ACT (NHPA) AS AMENDED (54 U.S.C. § 300101 ET SEQ.: HISTORIC PRESERVATION) AND ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT, AS AMENDED (54 U.S.C. §§ 312501-312508: PRESERVATION OF HISTORICAL AND ARCHEOLOGICAL DATA)

For the original or "base" PWM Project (also referred to as the PWM/Groundwater Replenishment (GWR) Project), M1W secured a Clean Water State Revolving Funds (CWSRF) from the State Water Resources Control Board (State Board) (Project No. C-06-8028-110). The State Board submitted their request for section of the project for review on March 3, 2016, with a finding of no historic properties affected. On April 19, 2016, the State Historic Preservation Officer (SHPO) concurred with the finding assigning the reference number EPA_2016_0304_001. On February 12, 2018, the State Board notified SHPO of project changes, stated that they determined that a finding of No Historic Properties Affected remained appropriate for the amended project, and requested the SHPO review and comment on it. After reviewing the submitted information, the SHPO concurred in a letter dated February 28, 2018.

A reasonable and good faith effort has been made to identify historic properties listed, determined, or potentially eligible for inclusion on the National Record of Historic Properties. The identification effort included a records search, a literature review, a field inventory, and Native American outreach. No historic properties were identified in the area of potential effects. Therefore, EPA has made a finding of No Historic Properties Affected for the installation of the injection wells and associated pipeline and

other project improvements will not have an effect on any historic properties within the Area of Potential Effects.

On January 25, 2022, EPA initiated consultation with the California SHPO. On February 17, 2022, SHPO concurred with EPA's finding of no historic properties affected.

Supporting Documentation:

Attachment G: Section 106 letter January 25, 2022

Attachment H: SHPO concurrence letter February 17, 2022

Attachment I: CWSRF consultation letters and SHPO concurrence letters, 2016-2018

7. ARCHAEOLOGICAL RESOURCES PROTECTION ACT (16 U.S.C. §§ 470AA-MM)

The Project is not located on federal or Indian lands; therefore, the regulations and requirements of this act do not apply.

Supporting Documentation:

Attachment J: U.S. Census Bureau and U.S. EPA American Indian Environmental Office's EPA Tribal Areas (1 of 4): Lower 48 States accessed through NEPAssist, January 25, 2022

8. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (25 U.S.C. § 3001 ET SEQ.)

The Project is not located on Indian or Native Hawaiian lands where Native American human remains, funerary objects, sacred objects, and cultural items may be present; therefore, the regulations and requirements of this act do not apply.

Supporting Documentation:

Attachment J: U.S. Census Bureau and U.S. EPA American Indian Environmental Office's EPA Tribal Areas (1 of 4): Lower 48 States accessed through NEPAssist, January 25, 2022

9. CLEAN WATER ACT (SECTION 404) AND RIVERS AND HARBORS ACT (SECTION 10) AND PROTECTION OF WETLANDS (EXECUTIVE ORDER NO. 11990 (1977), AS AMENDED BY EXECUTIVE ORDER NO. 12608 (1997))

There are no wetlands located in the project area. This project does not impact wetlands or waters of the United States, and no permit is required. There are no Section 10 waters in the project area.

Supporting Documentation:

Attachment J: Fish and Wildlife Service's National Wetland Inventory Data accessed through NEPAssist, January 25,2022

10. FLOOD PLAIN MANAGEMENT (EXECUTIVE ORDER NO. 11988 (1977), AS AMENDED BY EXECUTIVE ORDER NO. 12148 (1979))

This project is not located within the floodplain; therefore, this executive order does not apply.

Supporting Documentation:

Attachment J: FEMA's National Flood Hazard Layer accessed through NEPAssist, January 25, 2022

11. SAFE DRINKING WATER ACT (42 U.S.C. §§ 300F-300J-26)

No sole source aquifers exist at or near the Project location; therefore, the regulations and requirements of this act do not apply.

Supporting Documentation:

Attachment J: Data.gov Sole Source Aquifer data accessed through NEPAssist, January 25, 2022

12. FARMLAND PROTECTION POLICY ACT (7 U.S.C. §§ 4201-4209)

None of the Project components would be located on agricultural land. The project is located on lands that are not designated as prime farmland. Therefore, the regulations and requirements of this act do not apply. (see USDA Web Soil Survey Mapper)

Supporting Documentation:

Attachment K: Draft Supplemental EIR 2019

13. COASTAL ZONE MANAGEMENT ACT (16 U.S.C. §§ 1451-1466)

The California coastal zone generally extends 1,000 yards inland from the mean high tide line. The Project is not located within the coastal zone; therefore, the regulations and requirements of this act do not apply. (*See* https://coast.noaa.gov/czm/mystate/#California)

14. COASTAL BARRIERS RESOURCES ACT (16 U.S.C. §§ 3501-3510)

This project is not located within any coastal barriers. Therefore, the project would not conflict with the Coastal Barrier Resources Act. (*See* https://www.fws.gov/ecological-services/habitat-conservation/cbra/maps/mapper.html)

15. WILD AND SCENIC RIVERS ACT (16 U.S.C. §§ 1271-1287)

There are no Wild and Scenic Rivers within the project area; therefore, the regulations and requirements of this act do not apply. (*See* https://www.rivers.gov/river-app/index.html)

16. ESSENTIAL FISH HABITAT CONSULTATION PROCESS UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (16 U.S.C. §§ 1801-1891)

This project is not located within essential fish habitat. Therefore, the regulations and requirements of this act do not apply. (*See* https://www.habitat.noaa.gov/apps/efhmapper/)

17. MIGRATORY BIRD TREATY ACT (16 U.S.C. §§ 703-712)

This project does not involve the taking, killing, possession, transportation, or importation of migratory birds, their eggs, parts, or nests. Beneficial practices to avoid and minimize the incidental take of migratory birds, including best management practices and conservation measures will be implemented when necessary; therefore, this project would not be in conflict with this act.

18. CLEAN AIR ACT CONFORMITY (42 U.S.C. § 7506(C))

The Project is not located in a nonattainment or maintenance area for any relevant pollutants; therefore, the Project is not subject to a conformity determination.

Supporting Documentation:

Attachment J: U.S. EPA Non-Attainment Area data accessed through NEPAssist, January 25, 2022

Attachment K: Draft Supplemental EIR 2019

Attachment L: Final Supplemental EIR April 2020, certified in April 2021

19. WILDERNESS ACT (16 U.S.C. § 1131 ET SEQ.)

The project is not located in or near any Wilderness areas; therefore, the regulations and requirements of this Act do not apply. (*See* http://www.wilderness.net/map.cfm).

Attachment A: U.S. Environmental Protection Agency Environmental Justice Screen Reports

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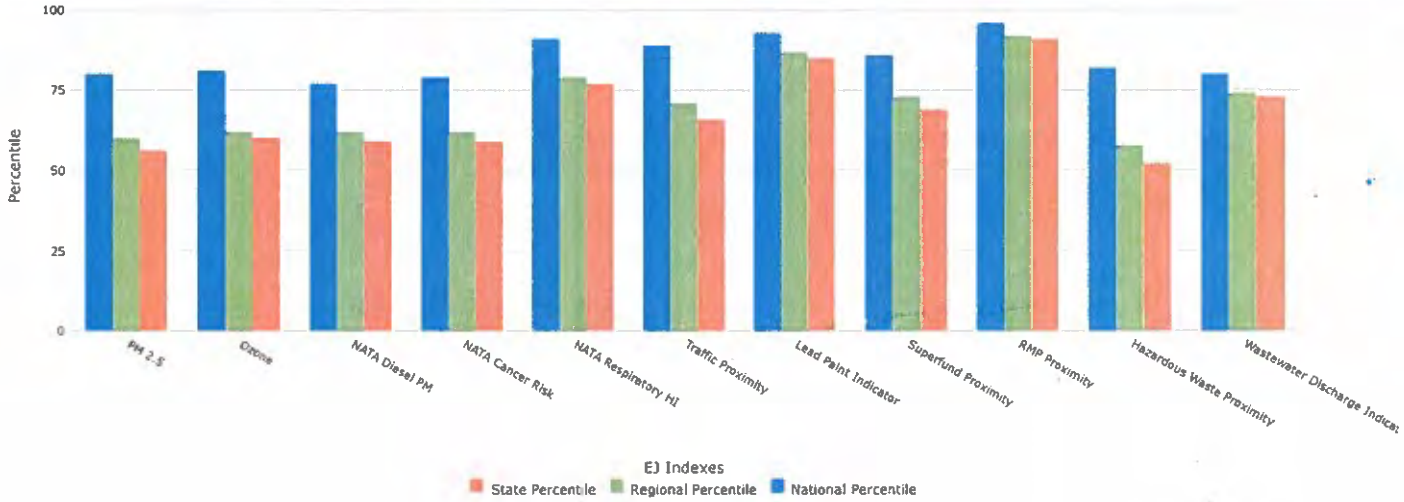
EJSCREEN Report (Version 2020)

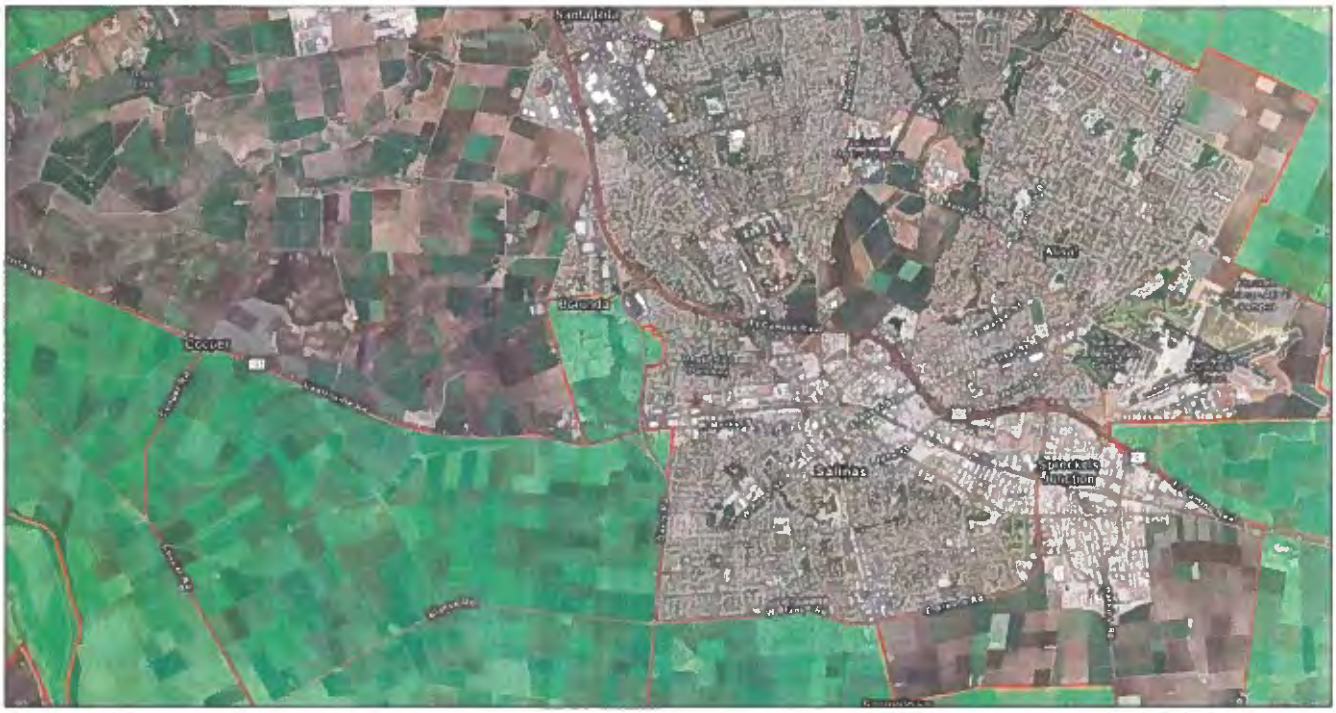
Blockgroup: 060530018011
CALIFORNIA, EPA Region 9
Approximate Population: 1,584
Input Area (sq. miles): 0.58

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	56	60	80
EJ Index for Ozone	60	62	81
EJ Index for NATA* Diesel PM	59	62	77
EJ Index for NATA* Air Toxics Cancer Risk	59	62	79
EJ Index for NATA* Respiratory Hazard Index	77	79	91
EJ Index for Traffic Proximity and Volume	66	71	89
EJ Index for Lead Paint Indicator	85	87	93
EJ Index for Superfund Proximity	69	73	86
EJ Index for RMP Proximity	91	92	96
EJ Index for Hazardous Waste Proximity	52	58	82
EJ Index for Wastewater Discharge Indicator	73	74	80

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	6.19	10.6	1	9.99	3	8.55	5
Ozone (ppb)	33.2	49.2	9	50.1	7	42.9	6
NATA* Diesel PM (µg/m³)	0.279	0.467	27	0.479	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	24	38	4	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.72	0.55	91	0.53	90-95th	0.44	95-100th
Traffic Proximity and Volume (daily traffic count/distance to road)	950	2000	49	1700	57	750	80
Lead Paint Indicator (% pre-1960s housing)	0.55	0.29	78	0.24	82	0.28	80
Superfund Proximity (site count/km distance)	0.097	0.17	55	0.15	62	0.13	65
RMP Proximity (facility count/km distance)	3.5	1.1	93	0.99	94	0.74	97
Hazardous Waste Proximity (facility count/km distance)	1.7	6.2	23	5.3	29	5	61
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	3.4E-05	18	60	18	60	9.4	49
Demographic Indicators							
Demographic Index	67%	47%	79	46%	80	36%	88
People of Color Population	81%	62%	66	60%	69	39%	84
Low Income Population	54%	33%	81	33%	81	33%	83
Linguistically Isolated Population	16%	9%	77	8%	80	4%	90
Population with Less Than High School Education	39%	17%	87	16%	88	13%	95
Population under Age 5	8%	6%	65	6%	65	6%	68
Population over Age 64	15%	14%	63	14%	62	15%	53

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at https://www.epa.gov/national-air-toxics-assessment

For additional information, see: www.epa.gov/environmentaljustice (http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

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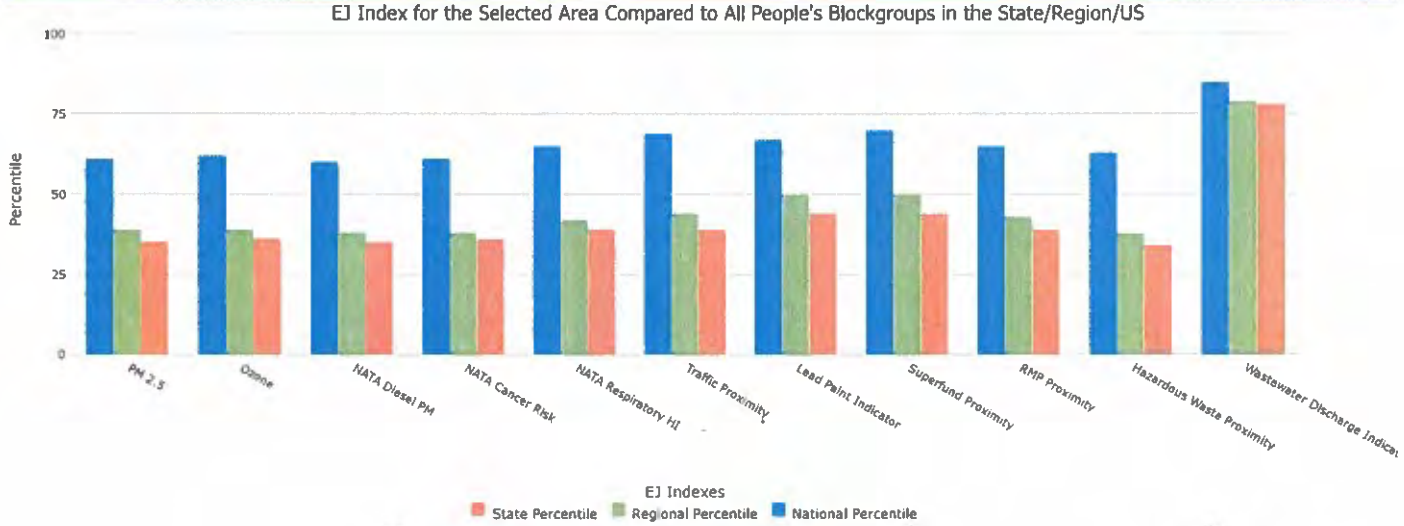
EJSCREEN Report (Version 2020)

Blockgroup: 060530103061
CALIFORNIA, EPA Region 9
Approximate Population: 1,441
Input Area (sq. miles): 24.18

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	35	39	61
EJ Index for Ozone	36	39	62
EJ Index for NATA* Diesel PM	35	38	60
EJ Index for NATA* Air Toxics Cancer Risk	36	38	61
EJ Index for NATA* Respiratory Hazard Index	39	42	65
EJ Index for Traffic Proximity and Volume	39	44	69
EJ Index for Lead Paint Indicator	44	50	67
EJ Index for Superfund Proximity	44	50	70
EJ Index for RMP Proximity	39	43	65
EJ Index for Hazardous Waste Proximity	34	38	63
EJ Index for Wastewater Discharge Indicator	78	79	85

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



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Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	6.39	10.6	1	9.99	4	8.55	7
Ozone (ppb)	32.7	49.2	8	50.1	7	42.9	5
NATA* Diesel PM (µg/m³)	0.162	0.467	9	0.479	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	23	36	3	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.68	0.55	85	0.53	80-90th	0.44	90-95th
Traffic Proximity and Volume (daily traffic count/distance to road)	490	2000	33	1700	42	750	67
Lead Paint Indicator (% pre-1960s housing)	0.11	0.29	39	0.24	47	0.28	39
Superfund Proximity (site count/km distance)	0.15	0.17	72	0.15	76	0.13	78
RMP Proximity (facility count/km distance)	0.46	1.1	43	0.99	49	0.74	58
Hazardous Waste Proximity (facility count/km distance)	0.38	6.2	9	5.3	12	5	34
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0035	18	75	18	75	9.4	73
Demographic Indicators							
Demographic Index	39%	47%	38	46%	41	36%	63
People of Color Population	44%	62%	28	60%	32	39%	62
Low Income Population	35%	33%	58	33%	58	33%	59
Linguistically Isolated Population	3%	9%	30	8%	35	4%	62
Population with Less Than High School Education	28%	17%	75	16%	77	13%	88
Population under Age 5	3%	6%	20	6%	21	6%	22
Population over Age 64	25%	14%	91	14%	89	15%	88

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice (http://www.epa.gov/environmentaljustice)

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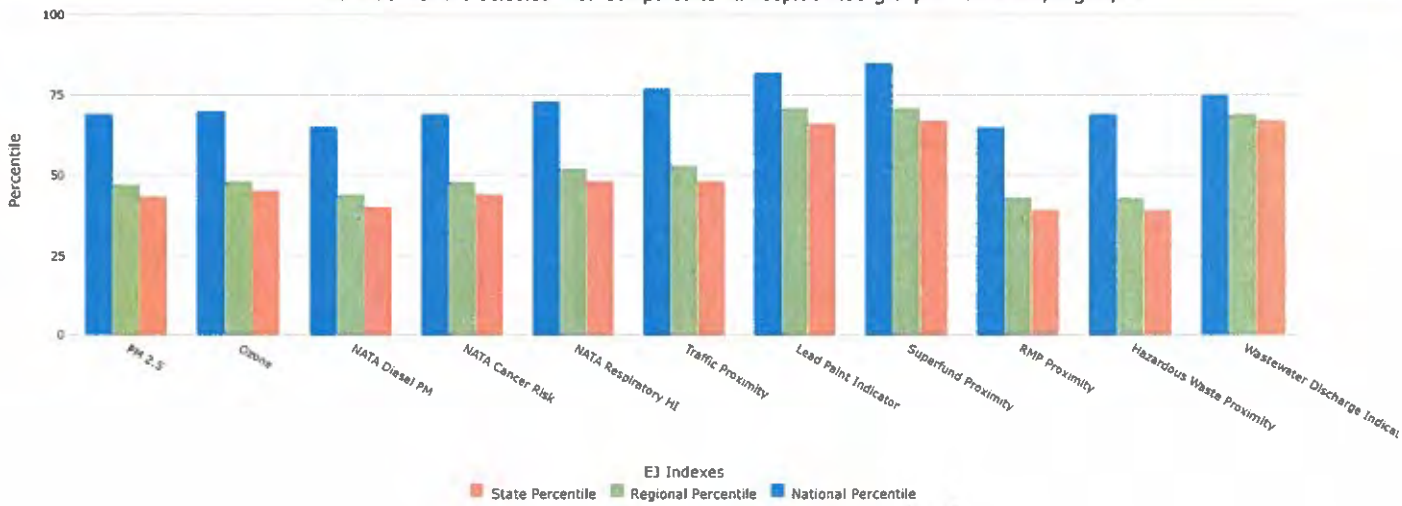
EJSCREEN Report (Version 2020)

Blockgroup: 060530141073
CALIFORNIA, EPA Region 9
Approximate Population: 2,280
Input Area (sq. miles): 30.75

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	43	47	69
EJ Index for Ozone	45	48	70
EJ Index for NATA* Diesel PM	40	44	65
EJ Index for NATA* Air Toxics Cancer Risk	44	48	69
EJ Index for NATA* Respiratory Hazard Index	48	52	73
EJ Index for Traffic Proximity and Volume	48	53	77
EJ Index for Lead Paint Indicator	66	71	82
EJ Index for Superfund Proximity	67	71	85
EJ Index for RMP Proximity	39	43	65
EJ Index for Hazardous Waste Proximity	39	43	69
EJ Index for Wastewater Discharge Indicator	67	69	75

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

Sites reporting to EPA	
Superfund NPL	1
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	6.09	10.6	0	9.99	2	8.55	4
Ozone (ppb)	32	49.2	8	50.1	6	42.9	4
NATA* Diesel PM (µg/m³)	0.139	0.467	7	0.479	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	23	36	3	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.46	0.55	28	0.53	<50th	0.44	50-60th
Traffic Proximity and Volume (daily traffic count/distance to road)	480	2000	33	1700	42	750	67
Lead Paint Indicator (% pre-1960s housing)	0.37	0.29	65	0.24	71	0.28	68
Superfund Proximity (site count/km distance)	0.2	0.17	82	0.15	85	0.13	85
RMP Proximity (facility count/km distance)	0.11	1.1	7	0.99	11	0.74	17
Hazardous Waste Proximity (facility count/km distance)	0.53	6.2	11	5.3	15	5	39
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	5.2E-07	18	54	18	54	9.4	39
Demographic Indicators							
Demographic Index	45%	47%	47	46%	49	36%	69
People of Color Population	57%	62%	41	60%	45	39%	71
Low Income Population	33%	33%	56	33%	56	33%	57
Linguistically Isolated Population	0%	9%	17	8%	20	4%	45
Population with Less Than High School Education	8%	17%	37	16%	39	13%	46
Population under Age 5	14%	6%	97	6%	96	6%	96
Population over Age 64	6%	14%	15	14%	16	15%	12

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

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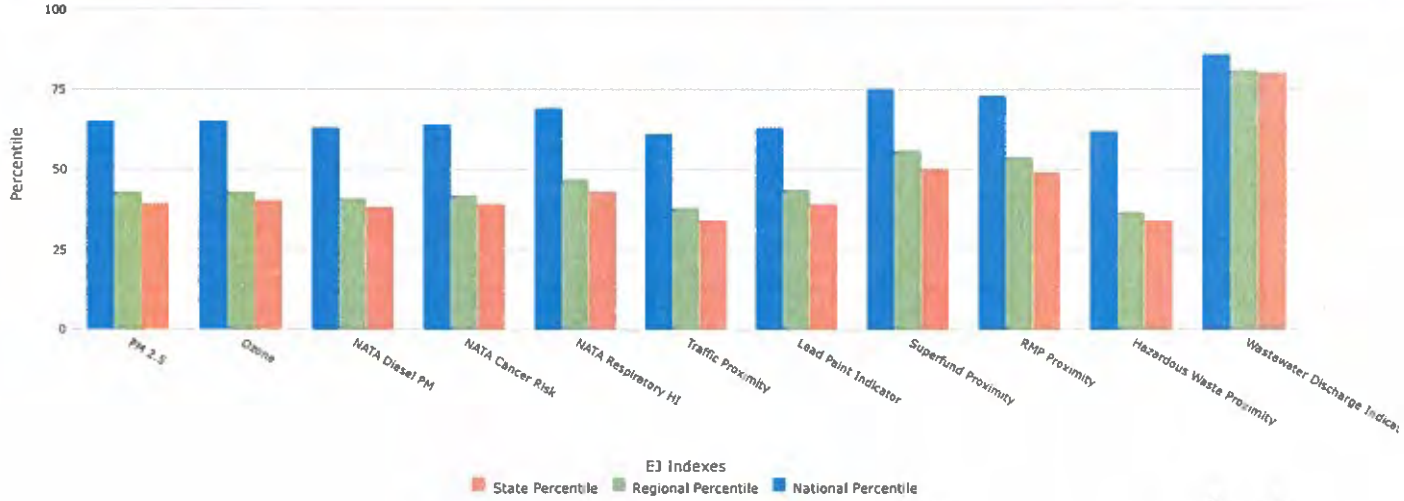
EJSCREEN Report (Version 2020)

Blockgroup: 060530143021
CALIFORNIA, EPA Region 9
Approximate Population: 1,617
Input Area (sq. miles): 5.11

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	39	43	65
EJ Index for Ozone	40	43	65
EJ Index for NATA* Diesel PM	38	41	63
EJ Index for NATA* Air Toxics Cancer Risk	39	42	64
EJ Index for NATA* Respiratory Hazard Index	43	47	69
EJ Index for Traffic Proximity and Volume	34	38	61
EJ Index for Lead Paint Indicator	39	44	63
EJ Index for Superfund Proximity	50	56	75
EJ Index for RMP Proximity	49	54	73
EJ Index for Hazardous Waste Proximity	34	37	62
EJ Index for Wastewater Discharge Indicator	80	81	86

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



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Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	6.32	10.6	1	9.99	4	8.55	6
Ozone (ppb)	31.9	49.2	8	50.1	6	42.9	4
NATA* Diesel PM (µg/m³)	0.159	0.467	9	0.479	<50th	0.478	<50th
NATA* Air Toxics Cancer Risk (risk per MM)	20	35	1	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.53	0.55	46	0.53	<50th	0.44	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	20	2000	5	1700	7	750	15
Lead Paint Indicator (% pre-1960s housing)	0.0039	0.29	11	0.24	17	0.28	11
Superfund Proximity (site count/km distance)	0.11	0.17	62	0.15	67	0.13	71
RMP Proximity (facility count/km distance)	0.66	1.1	53	0.99	58	0.74	66
Hazardous Waste Proximity (facility count/km distance)	0.13	6.2	4	5.3	6	5	17
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.0037	18	75	18	75	9.4	74
Demographic Indicators							
Demographic Index	43%	47%	44	46%	47	36%	67
People of Color Population	55%	62%	39	60%	43	39%	69
Low Income Population	32%	33%	55	33%	55	33%	56
Linguistically Isolated Population	5%	9%	42	8%	47	4%	71
Population with Less Than High School Education	18%	17%	60	16%	63	13%	75
Population under Age 5	9%	6%	78	6%	78	6%	80
Population over Age 64	17%	14%	74	14%	73	15%	66

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment

For additional information, see: www.epa.gov/environmentaljustice (http://www.epa.gov/environmentaljustice)

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EJScreen Report (Version 2.0)

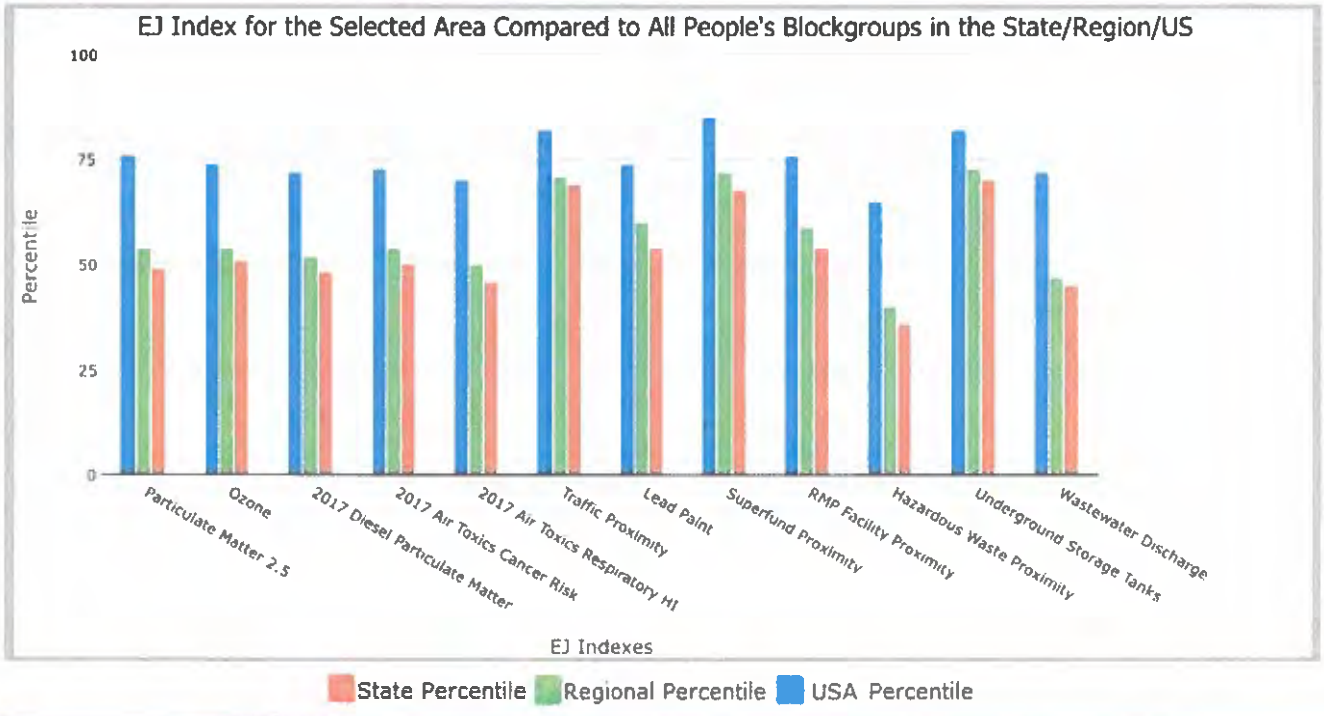
City: Marina, CALIFORNIA, EPA Region 9

Approximate Population: 21,990

Input Area (sq. miles): 9.76

(The study area contains 3 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	49	54	76
EJ Index for Ozone	51	54	74
EJ Index for 2017 Diesel Particulate Matter*	48	52	72
EJ Index for 2017 Air Toxics Cancer Risk*	50	54	73
EJ Index for 2017 Air Toxics Respiratory HI*	46	50	70
EJ Index for Traffic Proximity	69	71	82
EJ Index for Lead Paint	54	60	74
EJ Index for Superfund Proximity	68	72	85
EJ Index for RMP Facility Proximity	54	59	76
EJ Index for Hazardous Waste Proximity	36	40	65
EJ Index for Underground Storage Tanks	70	73	82
EJ Index for Wastewater Discharge	45	47	72



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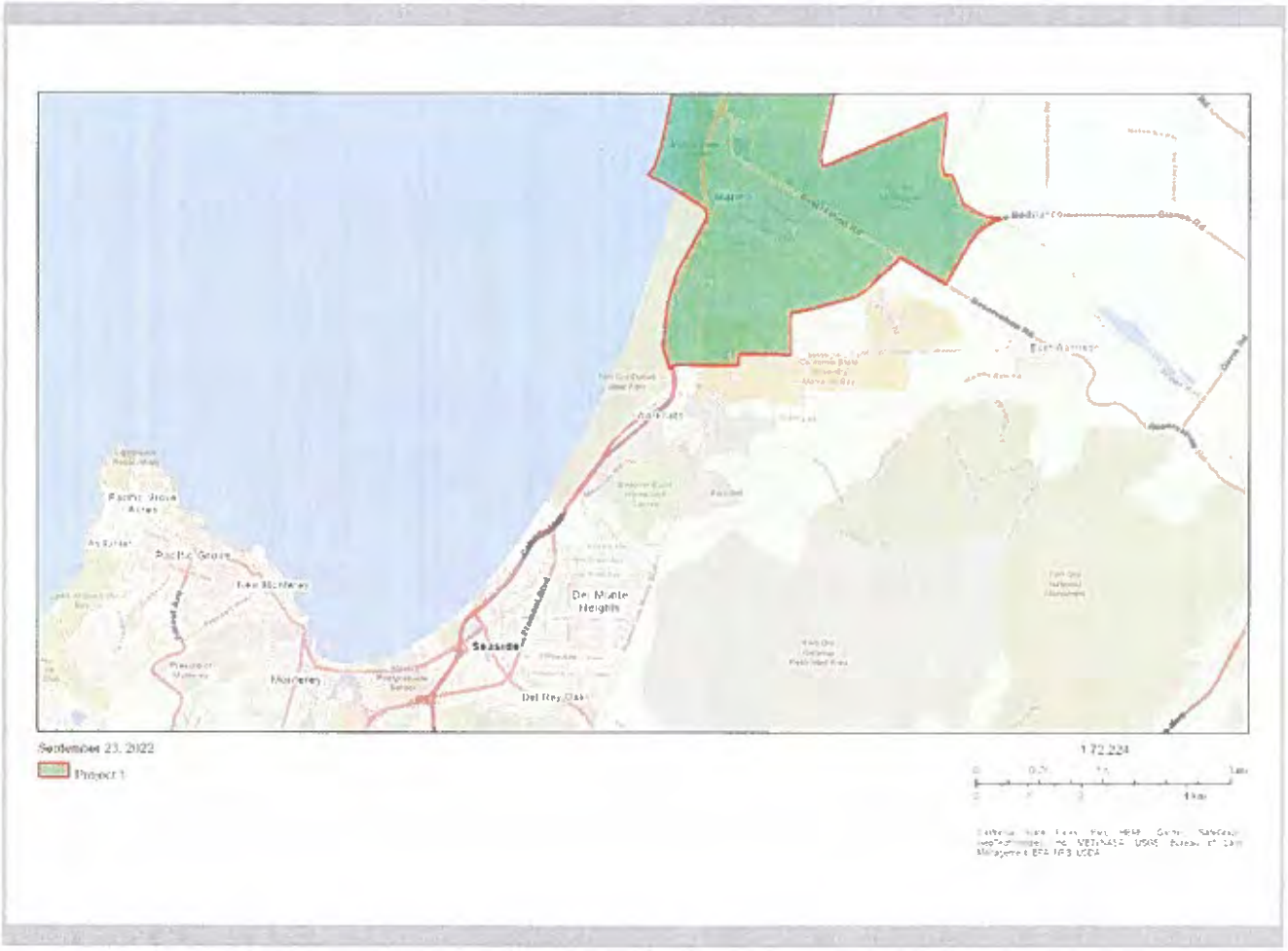
EJScreen Report (Version 2.0)

City: Marina, CALIFORNIA, EPA Region 9

Approximate Population: 21,990

Input Area (sq. miles): 9.76

(The study area contains 3 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.0)

City: Marina, CALIFORNIA, EPA Region 9

Approximate Population: 21,990

Input Area (sq. miles): 9.76

(The study area contains 3 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu g/m^3$)	7.34	11.7	2	10.8	11	8.74	17
Ozone (ppb)	31.3	48.1	8	49.6	6	42.6	4
2017 Diesel Particulate Matter* ($\mu g/m^3$)	0.16	0.33	16	0.33	<50th	0.295	<50th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	20	31	16	30	<50th	29	<50th
2017 Air Toxics Respiratory HI*	0.2	0.43	3	0.41	<50th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	560	1300	59	1300	62	710	71
Lead Paint (% Pre-1960 Housing)	0.086	0.29	36	0.23	45	0.28	37
Superfund Proximity (site count/km distance)	0.14	0.18	70	0.15	75	0.13	77
RMP Facility Proximity (facility count/km distance)	0.41	1.1	40	1	46	0.75	55
Hazardous Waste Proximity (facility count/km distance)	0.12	5.2	4	4.4	5	2.2	20
Underground Storage Tanks (count/km^2)	2.7	3.7	58	3.3	62	3.9	65
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0002	74	24	59	24	12	36
Socioeconomic Indicators							
Demographic Index	50%	47%	55	46%	57	36%	73
People of Color	64%	63%	48	60%	52	40%	74
Low Income	36%	31%	63	31%	63	31%	63
Unemployment Rate	5%	6%	52	6%	53	5%	60
Linguistically Isolated	10%	9%	64	8%	68	5%	83
Less Than High School Education	14%	17%	54	16%	57	12%	68
Under Age 5	8%	6%	69	6%	69	6%	71
Over Age 64	15%	14%	63	15%	62	16%	53

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update

For additional information, see: www.epa.gov/environmentaljustice

EJScreen Report (Version 2.0)

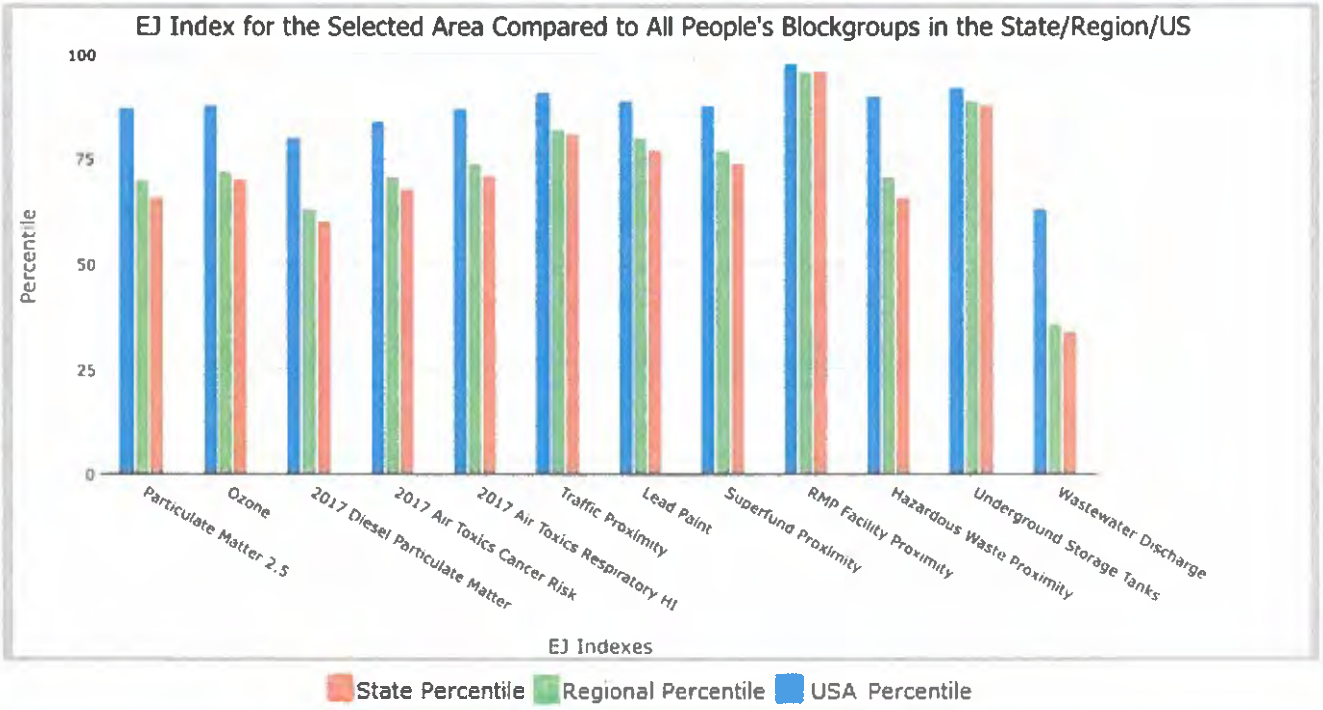
City: Salinas, CALIFORNIA, EPA Region 9

Approximate Population: 155,693

Input Area (sq. miles): 23.65

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	66	70	87
EJ Index for Ozone	70	72	88
EJ Index for 2017 Diesel Particulate Matter*	60	63	80
EJ Index for 2017 Air Toxics Cancer Risk*	68	71	84
EJ Index for 2017 Air Toxics Respiratory HI*	71	74	87
EJ Index for Traffic Proximity	81	82	91
EJ Index for Lead Paint	77	80	89
EJ Index for Superfund Proximity	74	77	88
EJ Index for RMP Facility Proximity	96	96	98
EJ Index for Hazardous Waste Proximity	66	71	90
EJ Index for Underground Storage Tanks	88	89	92
EJ Index for Wastewater Discharge	34	36	63



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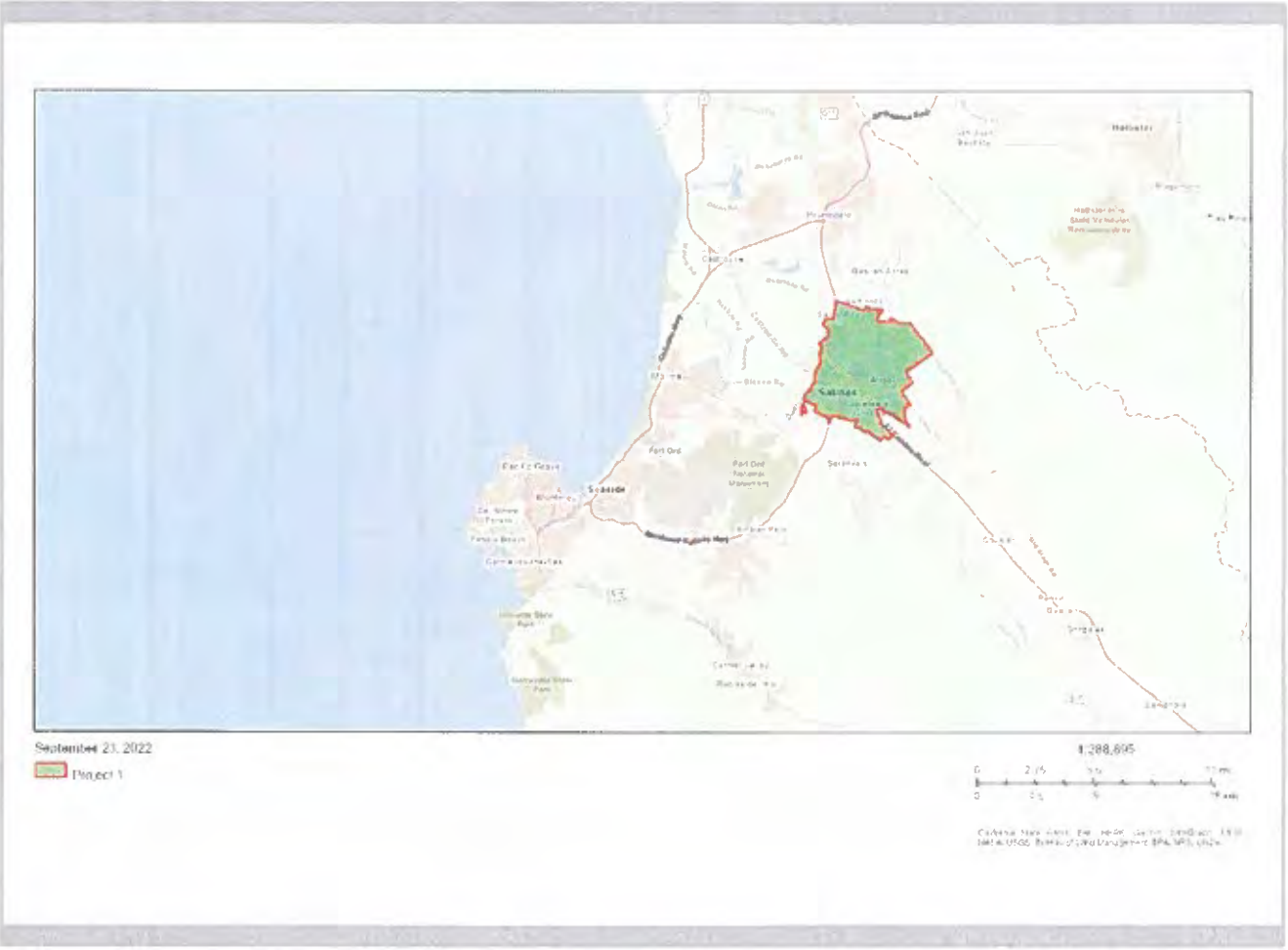
EJScreen Report (Version 2.0)

City: Salinas, CALIFORNIA, EPA Region 9

Approximate Population: 155,693

Input Area (sq. miles): 23.65

(The study area contains 1 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	6

EJScreen Report (Version 2.0)

City: Salinas, CALIFORNIA, EPA Region 9

Approximate Population: 155,693

Input Area (sq. miles): 23.65

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu g/m^3$)	7.23	11.7	2	10.8	10	8.74	15
Ozone (ppb)	33.4	48.1	11	49.6	8	42.6	7
2017 Diesel Particulate Matter* ($\mu g/m^3$)	0.15	0.33	14	0.33	<50th	0.295	<50th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	20	31	16	30	<50th	29	<50th
2017 Air Toxics Respiratory HI*	0.3	0.43	24	0.41	<50th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	820	1300	67	1300	69	710	79
Lead Paint (% Pre-1960 Housing)	0.27	0.29	56	0.23	63	0.28	60
Superfund Proximity (site count/km distance)	0.091	0.18	53	0.15	60	0.13	63
RMP Facility Proximity (facility count/km distance)	5	1.1	96	1	97	0.75	98
Hazardous Waste Proximity (facility count/km distance)	2.3	5.2	34	4.4	42	2.2	74
Underground Storage Tanks (count/km^2)	5.5	3.7	77	3.3	80	3.9	79
Wastewater Discharge (toxicity-weighted concentration/m distance)	6E-07	74	4	59	5	12	9
Socioeconomic Indicators							
Demographic Index	65%	47%	77	46%	79	36%	86
People of Color	87%	63%	75	60%	78	40%	87
Low Income	42%	31%	71	31%	71	31%	72
Unemployment Rate	5%	6%	48	6%	49	5%	56
Linguistically Isolated	19%	9%	84	8%	87	5%	92
Less Than High School Education	41%	17%	89	16%	90	12%	96
Under Age 5	8%	6%	74	6%	74	6%	76
Over Age 64	9%	14%	31	15%	31	16%	23

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN Report (Version 2020)

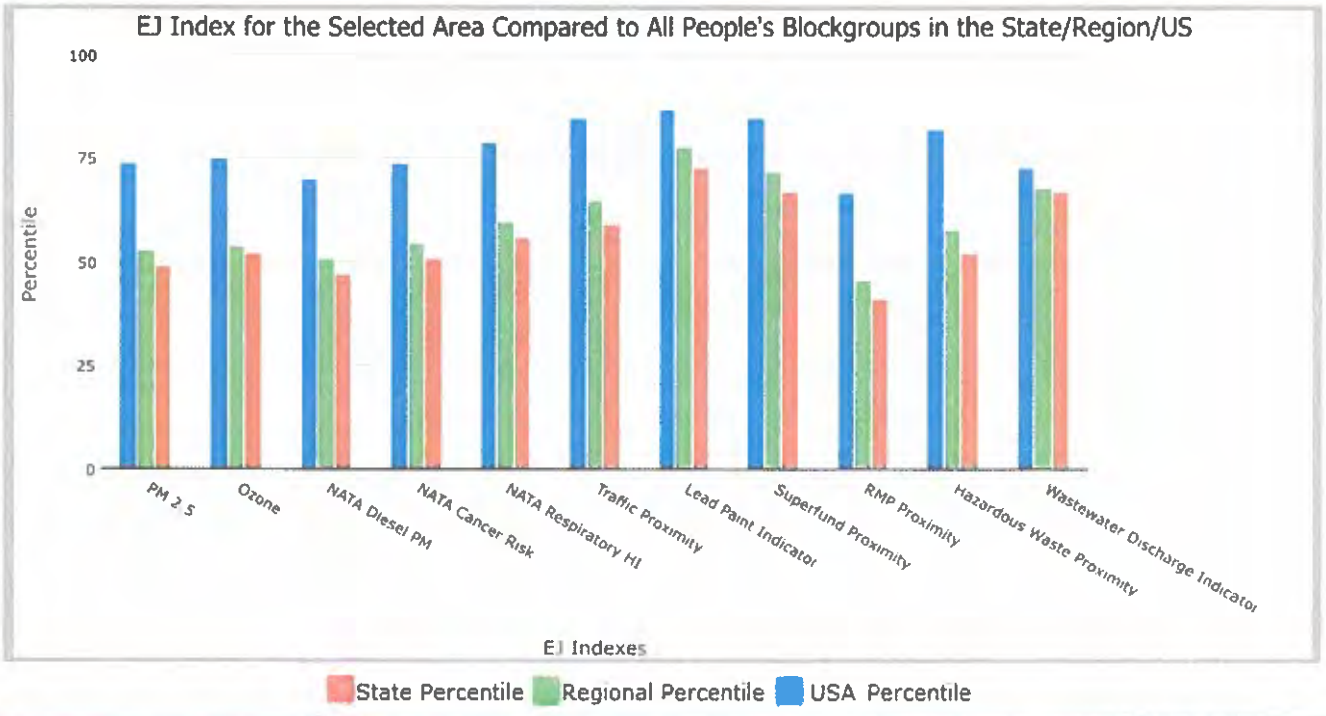
City: Seaside, CALIFORNIA, EPA Region 9

Approximate Population: 33,979

Input Area (sq. miles): 9.38

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	49	53	74
EJ Index for Ozone	52	54	75
EJ Index for NATA* Diesel PM	47	51	70
EJ Index for NATA* Air Toxics Cancer Risk	51	55	74
EJ Index for NATA* Respiratory Hazard Index	56	60	79
EJ Index for Traffic Proximity and Volume	59	65	85
EJ Index for Lead Paint Indicator	73	78	87
EJ Index for Superfund Proximity	67	72	85
EJ Index for RMP Proximity	41	46	67
EJ Index for Hazardous Waste Proximity	52	58	82
EJ Index for Wastewater Discharge Indicator	67	68	73



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EJSCREEN Report (Version 2020)

City: Seaside, CALIFORNIA, EPA Region 9

Approximate Population: 33,979

Input Area (sq. miles): 9.38

(The study area contains 1 blockgroup(s) with zero population.)

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

EJSCREEN Report (Version 2020)

City: Seaside, CALIFORNIA, EPA Region 9

Approximate Population: 33,979

Input Area (sq. miles): 9.38

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	6.1	10.6	0	9.99	2	8.55	5
Ozone (ppb)	31.4	49.2	7	50.1	6	42.9	4
NATA* Diesel PM (µg/m³)	0.184	0.467	12	0.479	<50th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	23	36	3	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.45	0.55	24	0.53	<50th	0.44	50-60th
Traffic Proximity and Volume (daily traffic count/distance to road)	730	2000	43	1700	51	750	76
Lead Paint Indicator (% Pre-1960 Housing)	0.38	0.29	65	0.24	71	0.28	68
Superfund Proximity (site count/km distance)	0.14	0.17	69	0.15	73	0.13	76
RMP Proximity (facility count/km distance)	0.11	1.1	6	0.99	11	0.74	17
Hazardous Waste Proximity (facility count/km distance)	2.1	6.2	28	5.3	35	5	67
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	3.5E-08	18	51	18	52	9.4	33
Demographic Indicators							
Demographic Index	52%	47%	57	46%	59	36%	75
People of Color Population	69%	62%	53	60%	57	39%	78
Low Income Population	36%	33%	60	33%	60	33%	61
Linguistically Isolated Population	8%	9%	58	8%	63	4%	81
Population With Less Than High School Education	20%	17%	63	16%	66	13%	78
Population Under 5 years of age	9%	6%	76	6%	76	6%	78
Population over 64 years of age	10%	14%	42	14%	42	15%	32

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

Attachment B: March 2022 letter to U.S. Fish and Wildlife Service

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

March 10, 2022

ELECTRONIC SUBMITTAL

Leilani Takano
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003

RE: 2016-F-0523; Request for Re-Initiate Consultation on the Section 7 Endangered Species Act Compliance for Monterey One Water Expanded Pure Water Monterey (PWM) Project (Expanded PWM Project) (the Project)

Dear Ms. Takano:

The U.S. Environmental Protection Agency's (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) program is requesting re-initiation of consultation with the U.S. Fish and Wildlife Service (the Service) on the proposed Monterey One Water (M1W or the Agency) Expanded Pure Water Monterey (PWM) Project (Expanded PWM Project) in Monterey County, California.

The Service issued a Biological Opinion (BO; 2016-F-0523) for the base or original PWM Project on December 20, 2016 (hereafter, referred to as the PWM BioOp). The Expanded PWM Project incorporates new components and areas of disturbance (see below); therefore, M1W prepared a Biological Assessment to document the changes to effects on special status species.

WIFIA was signed into law in 2014 and authorized the WIFIA program to be managed by EPA Headquarters. WIFIA was amended by section 1445 of the Fixing America's Surface Transportation Act of 2015 and section 5008 of the Water Infrastructure Improvements for the Nation Act of 2016. WIFIA is a federal credit program for eligible water and wastewater infrastructure projects. EPA selected Monterey One Water to submit an application for credit assistance for the Expanded PWM Project.

The Agency is also applying for Clean Water State Revolving Funds from the California State Water Resources Control Board, and Title XVI (WaterSMART) Funding from the U.S. Bureau of Reclamation for specified components of the Project: (1) Product Water Conveyance Facilities and Injection Well Facilities, and (2) modifications to the existing Advanced Water Purification Facility (AWPF), see Project Description, below.

Summary of Pure Water Monterey Biological Opinion

The PWM BioOp concluded that the base PWM/GWR Project would not likely jeopardize the continued existence of the California red-legged frog (*Rana draytonii*), the Monterey spineflower (*Chorizanthe pungens var. pungens*), or the Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*). The PWM BioOp determined the potential for incidental take of the California red-legged frog and required avoidance and minimization measures. The incidental take statement in the PWM BioOp specifies that if three (3) California red-legged frogs are found dead or injured, or if ten (10) are captured and relocated, USEPA must make immediate contact with the USFWS office to reinitiate formal consultation.

The incidental take statement does not apply to listed plant species; however, protection of listed plants is provided, namely it required substantial series of avoidance and minimization measures to limit the PWM Project's adverse effects on plant species. These include best management practice that shall be implemented during all identified phases of construction including but not limited to an Employee Education Program, construction monitoring, protective fencing of trees and vegetation, restoration of disturbed areas, erosion control techniques, on-site spill plan and containment measures, and refueling or maintenance of vehicles within a specified staging area. These measures are described in more detail below as they are also applicable to the Expanded PWM Project. The avoidance and minimization measures are the same as the mitigation measures that M1W adopted in their Mitigation Monitoring and Reporting Program (approved in November 2021) for the Expanded PWM Project.

The PWM BioOp assumes that Monterey spineflower and Monterey gilia occurrences within designated development parcels at the Fort Ord base would be lost and determined that such loss would not jeopardize either species.

Expanded PWM Project Description and Purpose

The base PWM/GWR Project is constructed and operational. In addition to the base PWM/GWR Project, the following additional components would be constructed and operated if the WIFIA loan or alternative financing is approved.

AWPF Expansion Component. The changes to the PWM/GWR Project to create the Expanded PWM Project would expand the AWPF 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). Modifications would include installation of additional treatment and pumping equipment, chemical storage, pipelines, and facility appurtenances within the 3.5-acre existing building area. No new ground disturbance nor changes to the AWPF buildings or overhanging canopies are proposed as part of the Expanded PWM Project. All ground disturbance and construction of structures occurred during construction of the base project in 2018 to 2019. Ground disturbance, concrete work, and building/canopy construction, including the depth and heights of construction and permanent facilities, are not being modified for the Expanded PWM Project. A detailed description is provided in Enclosure 1.

Injection Well Facilities Phase 4 (incl. Conveyance Facilities). The changes to implement the Expanded PWM Project would include construction and operation of additional product water conveyance facilities, specifically, a new product water conveyance pipeline and appurtenances extending from the existing Blackhorse Reservoir to an Expanded Injection Well Area. The southern portion of the pipeline would be located within the existing paved area of Eucalyptus Road. The Expanded Injection Well area will include

construction and operation of additional Injection Well facilities (incl. two deep injection wells, electrical and mechanical equipment), additional monitoring well, and an additional backflush pipelines and percolation basin. A detailed description is provided in Enclosure 1, Section 1.3.

The Expanded PWM Project purpose is to replace and augment water supplies for the Monterey Peninsula area customers of California American Water Company by expanding the base PWM/GWR Project advanced water purification facility and injection capacities. This project will benefit the Carmel River flows and habitat, including for California red-legged frog and south-central coast California steelhead. With the increased capacity, M1W would also be able to divert additional excess secondary effluent currently being discharged to the ocean; thereby, reducing pollutant loads to the Monterey Bay.

Project Location and Habitat

The changes to the base PWM/GWR Project to create the Expanded PWM Project are located in northern Monterey County, within unincorporated parts of the county adjacent to the City of Seaside and within the city itself, as shown in Enclosure 1 (Figures 1 and 2).

Expanded Advanced Water Purification Facility: The AWPF is located in the northwest corner of the larger Regional Treatment Plant (RTP), shown in the PWM/GWR Final EIR as being within an Urban and Developed landscape unit due to existing structures and development, although the surrounding area is generally located in the Agricultural landscape unit. The site is characterized by large scale public utility/industrial-looking tanks and structures. The 2010 Monterey County General Plan classifies this site as Public/Quasi-Public. The area next to the AWPF contains industrial-type wastewater and solid waste management equipment and facilities similar to the PWM Project facilities, including the Monterey Regional Waste Management District Landfill, leased land on which composting and other industrial-type operations occur, and row crops (strawberries) to the west and south.

Product Water Conveyance Pipeline and Expanded Injection Well Facilities: The product water conveyance pipeline component is primarily within the Urban and Developed landscape unit, except for the northern most part, which would be constructed within an existing dirt road, and a portion of the alignment located near the area of the Expanded Injection Well Facilities. Although the northern part of the alignment is located within an existing disturbed area, the area immediately surrounding the existing dirt road is within the Coastal Scrub landscape unit. Similarly, the southern part of this modification would also be located within the Coastal Scrub landscape unit. The remaining part of the alignment located within the right of way of the existing paved portions of Eucalyptus Road is within the Urban and Developed landscape unit. In the 2010 Monterey County General Plan, specifically the Fort Ord Master Plan, the Product Water Conveyance Pipeline is designated as Low Density Residential and School/University. In the 2003 City of Seaside General Plan, the Product Water Conveyance Pipeline location is designated as Medium Density Residential. The existing visual character of the Injection Well Facilities site is characterized to be in the Coastal Scrub landscape unit. the visual character of the Expanded Injection Well Area is similar. The Expanded Injection Well Area has historically been disturbed by former military training operations and environmental remediation activities. The Expanded Injection Well Facilities Area is designated as Low-Density Single Family Residential in the 2003 Seaside General Plan.

Identified Listed Species and Critical Habitats

Surveys for special-status species and biological resources were conducted for species on the Information for Planning and Conservation (IPaC) species list, and the surveys identified three federally listed flowering plant species which are known or have the potential to occur within the Action Area, the endangered Monterey gilia, endangered Yadon's piperia (*Piperia yadonii*), and threatened Monterey spineflower. No federally listed wildlife species nor critical habitat is known or have the potential to occur within the Action Area and/or be affected by the Project. However, several avian species protected under the Migratory Bird Treaty Act are known or have the potential to occur within the Action Area. The IPaC is included in Appendix A of Enclosure 1.

Monterey gilia is a federally Endangered, state Threatened, and California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1B species that blooms from April through June typically found in sandy openings of maritime chaparral, cismontane woodland, coastal dune and central coastal scrub habitats. Botanical surveys conducted for the Expanded PWM/GWR Project Supplemental EIR documented 22 polygons of Monterey gilia, totaling approximately 0.1 acre and 35 points within the Focused Botanical Survey Area (FBSA). The Proposed Action will have **no effect** on Monterey gilia as the project proponent is committed to modifying project design to avoid all impacts to this species.

Yadon's piperia is a federally Endangered perennial herb that blooms from May through August known to occur in sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. No specimen was identified in the FBSA during surveys conducted in 2019, however, suitable habitat is present in un-surveyed areas. Project design features and avoidance and minimization measures adopted as part of the Project MMRP will reduce the effects of the Project on Yadon's piperia, however, construction activities **are likely to adversely affect** Yadon's piperia ***if*** they are documented in protocol-level surveys planned in spring and summer of 2022.

Monterey spineflower is a federally threatened, CNPS CRPR 1B, and Fort Ord Habitat Management Plan (HMP) species with designated critical habitat in the vicinity of the FBSA. The Monterey spineflower blooms from April to June, typically occurring on open sandy or gravelly soils on relic dunes in coastal dune, central coastal scrub, and central maritime chaparral habitats, though it can also be associated with cismontane woodlands and valley and foothill grasslands. The Expanded PWM/GWR Project Supplemental EIR identified 156 polygons of Monterey ceanothus, totaling approximately 1.3 acres and 308 points (621 individuals) within the FBSA. Project design features and avoidance and minimization measures adopted as part of the Project MMRP will reduce the effects of the Project on the Monterey spineflower, however, construction activities **are likely to adversely affect** the Monterey spineflower if they are documented in protocol-level surveys planned in spring and summer of 2022.

Various migratory bird species have a potential to nest within any of the large trees within and adjacent to the Biological Survey Area (BSA), which include individual or small clusters of cypress and coast live oak trees. As identified in Enclosure 1, migratory bird species that may be present within the Action Area include but are not limited to: common poorwill (*Phalaenoptilus nuttallii*), western meadowlark (*Sturnella neglecta*), Townsend's warbler (*Setophaga townsendii*), white-crowned sparrow (*Zonotrichia aleucophrys*), California thrasher (*Toxostoma redvivum*), ash-throated fly catcher (*Myiarchus cinerascens*), tree swallow (*Tachycineta bicolor*), and California horned lark (*Eremophila alpestris actia*).

Avoidance and Minimization Measures

As concluded in Enclosure 1, the Proposed Action would potentially adversely affect special-status species due to construction of Product Water Conveyance Pipeline and Injection Well Facilities, if the species are found during protocol level surveys of the site in spring and summer of 2022 and avoidance through project design is not feasible. The BSA and Action Area are located within designated "development" parcels on the former Fort Ord, within the jurisdiction of the City of Seaside and County of Monterey. The HMP anticipates losses to these species because of redevelopment; however, with the designated reserves and corridors and habitat management requirements in place, the losses of individuals are not expected to jeopardize the long-term viability of this species or its populations on former Fort Ord.

The City of Seaside and County of Monterey, as well as all other land recipients, are required to implement HMP requirements in accordance with the deed covenants. Starting in 1997, the local jurisdictions coordinated with the Service over a period of over 20 years to prepare the Fort Ord HCP to comply with these requirements. The BA for the Original PWM/GWR Project and the subsequently issued project specific, PWM BioOp were prepared under the assumption that the HCP would be approved. Therefore, the Proposed Action for the Original PWM/GWR was required to identify sensitive biological resources that may be salvaged for use in restoration activities in habitat reserve areas, in compliance with the HMP and 2017 Programmatic BioOp. Mitigation for individual populations of these species was not a required component of the HMP or BioOp.

However, in June 2020, the local jurisdictions decided not to approve the Fort Ord HCP and not collectively pursue base-wide incidental take permits and the Service has requested that the local jurisdictions initiate the steps necessary to comply with the HMP. The County of Monterey is currently preparing their RMP and anticipates approval by the Service at the end of 2022; the status of the required RMP and Borderland Management Plan for the City of Seaside is unknown. Currently, the City of Seaside and the County of Monterey are not yet in compliance with the HMP and 2017 Programmatic BO. As such, the project applicant recognizes that additional mitigation may be required for the proposed action. Implementation of the following measures are recommended to reduce or avoid impacts of project actions to Monterey spineflower and Yadon's piperia within the Action Area.

As the proposed project will receive Federal funding, the action agency must consult with the Service under Section 7 of the ESA. As these are plant species and any potential effects on these species will occur on non-federal lands, no take authorization is needed for the proposed action. However, the project proponents will reduce effects on these species through the implementation of the following mitigation measures:

1. The project proponents shall retain a qualified biologist to conduct protocol-level botanical surveys for federally listed plant species, including the Monterey spineflower and Yadon's piperia within the Action Area, where impacts are anticipated. Protocol-level surveys shall be conducted by a qualified biologist at the appropriate time of year for species with the potential to occur within the site. A report describing the results of the surveys shall be

provided to the project proponents prior to any ground disturbing activities. The report shall include but is not limited to results of the survey, and, if found the number and locations of individuals/populations identified within the Action Area. The report shall be used to influence the design of project components. The project proponents will modify the project design to the extent feasible while taking into consideration other site and engineering constraints to avoid impacts to Monterey spineflower.

2. A qualified biologist must conduct an Employee Education Program for the construction crew prior to any construction activities. A qualified biologist must meet with the construction crew at the onset of construction at the site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which would ensure the safety of the monitor during such activities, 3) the federally-listed species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the Service; and 6) the proper procedures if a federally listed species is encountered within the site.

3. Any landscaping or replanting required for the project shall not use species listed as noxious by the California Department of Food and Agriculture (CDFA).

4. Bare and disturbed soil shall be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the Action Area.

5. Construction equipment shall be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.

6. All non-native, invasive plant species shall be removed from disturbed areas prior to replanting.

7. To mitigate impacts due to permanent above ground structures to Monterey spineflower and Yadon’s piperia, the project proponents will consult with the Service and the underlying land use jurisdictions responsible for habitat management in the Monterey County Munitions Response Area (MRA) under the Environmental Services Cooperative Agreement to develop a plan to collect seed or soil containing seedbank (dependent upon the construction schedule) from Monterey spineflower and Yadon’s piperia plants that will be impacted during construction for redistribution within the temporary construction easement. The project proponent will finalize the location of this seed collection and redistribution obligation in consultation with the USFWS. The project proponents will create and maintain suitable habitat using a 1:1 ratio and will monitor the area for a three-

year period to ensure success of the restoration effort. A Rare Plant Restoration Plan, approved by M1W prior to commencing construction on the component site upon which the rare plant species would be impacted, shall be prepared and implemented by a qualified biologist. The plan shall include, but is not limited to, the following:

a. A detailed description of on-site and/or off-site mitigation areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, including, if appropriate, increased planting ratio to ensure the applicable success ratio. Although off-site mitigation areas may be available, the City's ordinance related to military munitions and deed restrictions prohibit exportation of soil from the site; therefore, offsite areas for mitigation may not be feasible.

b. A description of a 3-year monitoring program, including specific methods of vegetation monitoring, data collection and analysis, restoration goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

As identified above, the project has been designed to avoid impacts to Monterey gilia where it was observed within the FSA and the project design will be modified to completely avoid impacts to Monterey gilia if found in the Action Area during future surveys. Therefore, no additional measures to mitigate effects to Monterey gilia are necessary as impacts to this species will be avoided.

<u>Endangered or Threatened Species Evaluation</u>

Proposed determinations are supported by the *Biological Assessment for the Re-initiation of Consultation for the Pure Water Monterey Groundwater Replenishment Project* (DD&A, October 25, 2021) in Enclosure 1.

Plant Species
USEPA has determined the Project **will not affect Monterey gilia** and is **likely to adversely affect** Monterey spineflower and Yadon's piperia, if documented in protocol-level plant surveys to be conducted in 2022.

Migratory Birds
Temporary disturbance may occur to foraging migratory birds during construction activities, and if conducted during nesting season, activities such as vegetation removal or site grading could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Operation of the Project is not anticipated to result in impacts to bird species protected by the MTBA. Avoidance and minimization measures adopted as part of the Project MMRP will reduce the effects of the Project on migratory birds such that the Project **may affect, but is not likely to adversely affect,** migratory birds.

Critical Habitat
As previously stated, and further detailed in Enclosure 1, there are no areas of designated critical habitat within the Action Area and thus, the Project **will not affect** critical habitat.

We look forward to consulting on any change to the determinations made for the Project. Please provide any comments and concerns you may have within 30 days. EPA will consider them and provide formal responses to comments. Correspondence can be submitted to the EPA contact for this Project, Alaina McCurdy at mccurdy.alaina@epa.gov or (202) 564-6996. Thank you for your review and coordination with EPA on this Project.

Sincerely,

Alaina McCurdy
WIFIA Management Division
Office of Wastewater Management

Enclosure
1. *Biological Assessment for Re-initiation of Consultation for the Pure Water Monterey Project*, prepared by Denise Duffy & Associates, March 7, 2022, including IPaC Species List

cc:

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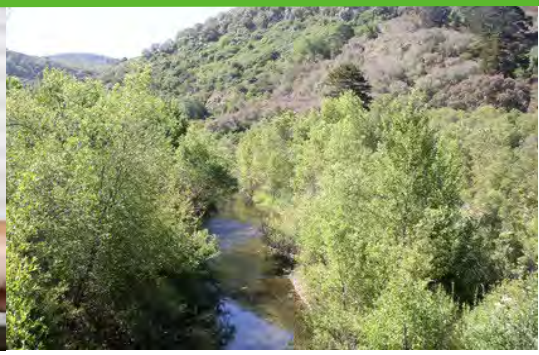
Attachment C: Draft Biological Assessment (now outdated)

BIOLOGICAL ASSESSMENT

FOR THE U.S. FISH AND WILDLIFE SERVICE

PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT





RE-INITIATION OF CONSULTATION
MARCH 7, 2022

Attachment D, the June 2022, version supersedes and replaces this version. If the prior draft is desired, please contact Alison@my1water.org to request a copy.

Project Proponents:

Monterey One Water
in partnership with
Monterey Peninsula Water Management District

Prepared by:

Denise Duffy & Associates, Inc.
Environmental Consultants / Resource Planners
947 Cass Street, Suite 5
Monterey, CA 93940
(831) 373-4341

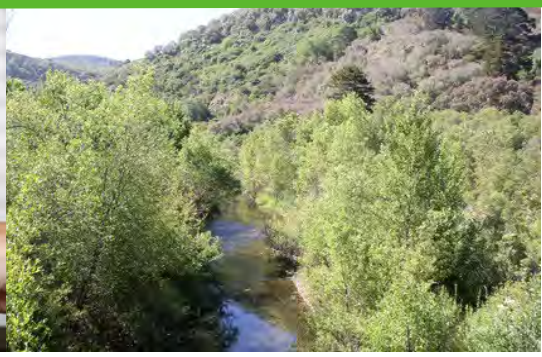
Attachment D: Revised Biological Assessment

BIOLOGICAL ASSESSMENT

FOR THE U.S. FISH AND WILDLIFE SERVICE

PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT





RE-INITIATION OF CONSULTATION
JUNE 2, 2022

Project Proponents:

Monterey One Water
in partnership with
Monterey Peninsula Water Management District

Prepared by:

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Biological Assessment

for the

U.S. Fish and Wildlife Service

Pure Water Monterey Groundwater Replenishment Project, Monterey County

Re-initiation of Consultation

June 2, 2022

Prepared by:
Denise Duffy & Associates, Inc.
947 Cass Street
Monterey, CA 93940

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Summary of Findings, Conclusions and Determinations

The Service issued a Biological Opinion (BO; 2016-F-0523) on December 20, 2016, for funding of Monterey One Water's (M1W's; formerly Monterey Regional Water Pollution Control Agency) Pure Water Monterey Groundwater Replenishment Project (Original PWM/GWR Project) under the Clean Water State Revolving Fund (SRF) and its effects on the federally threatened California red-legged frog (*Rana draytonii*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*) and the federally endangered Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*). On April 26, 2021, the M1W Board of Directors approved the Expanded PWM/GWR Project (Exp. PWM/GWR Project), which includes increasing the amount of municipal wastewater utilized, additional equipment to the Advanced Water Purification Facility, additional product water conveyance facilities, modifications to the injection well facilities, and additional California American Water Company facilities. M1W, in partnership with the Monterey Peninsula Water Management District, intends to pursue funding for Specified Components of the Exp. PWM/GWR Project through the SRF, the Water Infrastructure Finance and Innovation Act (WIFIA) (https://www.epa.gov/wifia) from the U.S. Environmental Protection Agency, and Title XVI (WaterSMART) Grant Funding from the U.S. Bureau of Reclamation.

One plant species is known to occur within the Action Area and/or to be affected by the project: Monterey Spineflower. In addition, two plant species were observed near the Action Area and could be affected by the project: Monterey gilia (avoidance and minimizations measures including exclusionary fencing around known occurrences will prevent adverse effects) and Monterey spineflower. The rationale for determination of presence or absence within the Action Area is based on the results of protocol-level surveys conducted in 2019 and 2022.

No federally-listed wildlife species are known or have the potential to occur within the Action Area and/or be affected by the project. The rationale for determination of presence or absence within the Action Area is based on local occurrence data and the habitat features documented to occur within the Action Area. However, avian species protected under the Migratory Bird Treaty Act are known or have the potential to occur within the Action Area.

Design features of the Proposed Action and the avoidance and minimization measures provided within this document will reduce the effects of the Proposed Action to Monterey spineflower and Monterey gilia. Therefore, construction activities are likely to **adversely affect** Monterey spineflower and **may affect but are not likely to adversely affect** Monterey gilia. Avoidance and minimization measures included in this document will reduce effects to migratory birds. As such, the project **may affect, but is not likely to adversely affect** migratory birds.

There are no areas of designated critical habitat within the Action Area. As such, the Proposed Action **will not affect** critical habitat.

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Appendix A – Official U.S. Fish and Wildlife Service IPaC Trust Resource Report for Consultation (generated October 13, 2021)

Appendix B – Federally-Listed Plant Species Survey Results

List of Figures

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List of Abbreviated Terms

ACOE	U.S. Army Corps of Engineers
AF	Acre feet
AFY	Acre feet per year
AWPF	Advanced Water Purification Facility
BA	Biological Assessment
BO	Biological Opinion
BSA	Biological Study Area
CalAm	California American Water Company
CDFW	California Department of Fish and Wildlife
CFEIR	Consolidated Final EIR for the Original PWM/GWR Project
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CRLF	California red-legged frog
CTS	California Tiger Salamander
DD&A	Denise Duffy & Associates, Inc.
EA	Environmental Assessment
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
Exp. PWM/GWR	Expanded Pure Water Monterey/Groundwater Replenishment Project
FONSI	Finding of No Significant Impact
FSA	Focused Survey Area (2019)
GIS	Geographic Information System
GPS	Global Positioning System
HMP	Habitat Management Plan for the Former Fort Ord
IPaC	Information for Planning and Consultation
M1W	Monterey One Water
M1W Board	Monterey One Water Board of Directors
MBTA	Migratory Bird Treaty Act of 1918
MCWD	Marina Coast Water District
mgd	Million gallons per day

MPWMD	Monterey Peninsula Water Management District
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
Original PWM/GWR	Original Pure Water Monterey/Groundwater Replenishment Project
PG&E	Pacific Gas and Electric
RUWAP	Regional Urban Water Augmentation Project
SCADA	Supervisory control and data acquisition
SEIR	Supplemental Environmental Impact Report for the Exp. PWM/GWR Project
Service	United States Fish and Wildlife Service
SHPO	State Historic Preservation Officer
SRF	State Revolving Funds
SWRCB	State Water Resources Control Board
WIFIA	Water Infrastructure Finance and Innovation Act

Chapter 1. Introduction

In accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) the State Water Resources Control Board (SWRCB) acting as the U.S. Environmental Protection Agency's (EPA's) designee for environmental compliance with federal environmental regulations, consulted with the U.S. Fish and Wildlife Service (Service) in 2016 for funding of Monterey One Water's[1] (M1W's) Pure Water Monterey Groundwater Replenishment Project (Original PWM/GWR Project or Original Proposed Action) under the Clean Water State Revolving Fund (SRF) and its effects on the federally threatened California red-legged frog (CRLF; *Rana draytonii*) and Monterey spineflower (*Chorizanthe pungens* var. *pungens*) and the federally endangered Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*). Consultation was concluded when the Service issued a Biological Opinion (BO; 2016-F-0523) on December 20, 2016.

On April 26, 2021, the M1W Board of Directors (M1W Board) approved the Expanded PWM/GWR Project (Exp. PWM/GWR Project), which includes increasing the amount of municipal wastewater utilized, additional equipment to the Advanced Water Purification Facility, additional product water conveyance facilities, modifications to the injection well facilities, and additional California American Water Company (CalAm) facilities. M1W, in partnership with the Monterey Peninsula Water Management District (MPWMD), intends to pursue funding for Specified Components of the Exp. PWM/GWR Project through the SRF, the Water Infrastructure Finance and Innovation Act (WIFIA) (https://www.epa.gov/wifia) from the U.S. Environmental Protection Agency, and/or the Title XVI (WaterSMART) Grant Funding Program from the U.S. Bureau of Reclamation. The Specified Components include product water conveyance facilities and injection well facilities.

The purpose of this Biological Assessment (BA) is to provide technical information and to review the Specified Components of the PWM/GWR Project in sufficient detail to determine to what extent the Proposed Action may affect threatened, endangered, or proposed species; designated and proposed critical habitat; and avian species protected under the Migratory Bird Treaty Act (MBTA). The Proposed Action for this BA and consultation is the funding of the Specified Components of the Exp. PWM/GWR Project by the State Water Board/EPA and U.S. Bureau of Reclamation. The BA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the ESA (16 U.S. C 1536(c)). The document presents technical information upon which later decisions regarding Proposed Action effects are based.

[1] Subsequent to issuance of the 2016 BO, the Monterey Regional Water Pollution Control Agency (MPWPCA), who is identified as the project proponent in the BO, changed their name to Monterey One Water (M1W).

1.1 Background

The project description in this BA has been adapted from the Final Supplemental Environmental Impact Report (SEIR) for the Exp. PWM/GWR Project to support the federal consultation process. Throughout the duration of PWM/GWR Project planning and implementation, various modifications to the project have been made, resulting in different names and terminology used when referencing the project. **Table 1-1** below provides a summary of the nomenclature used in this BA to describe the PWM/GWR Project.

Table 1-1 Nomenclature Summary

Name	Acronym	Description
Original Pure Water Monterey Groundwater Replenishment Project	Original PWM/GWR Project	This term is used to refer to the original project that was analyzed in a Consolidated Final Environmental Impact Report (CFEIR) and approved by the M1W Board on October 8, 2015. This project includes source water diversions, an Advanced Water Purification Facility, product water conveyance facilities, injection well facilities, and CalAm Facilities. This project has been constructed and is currently operational.
Expanded Pure Water Monterey Groundwater Replenishment Project	Exp. PWM/GWR Project	This term is used to refer to the project that was analyzed in a Supplemental Environmental Impact Report (SEIR) and certified by the M1W Board on April 26, 2021. This project includes increasing the amount of municipal wastewater utilized, additional equipment to the Advanced Water Purification Facility, additional product water conveyance facilities, modifications to the injection well facilities, and additional CalAm facilities. This project has not been constructed.
Specified Components of the Pure Water Monterey Groundwater Replenishment Project	Specified Components of the PWM/GWR Project	This term in used to describe certain components of the Exp. PWM/GWR Project for which M1W must update its federal consultation under the Endangered Species Act. These components include the Injection Well Facilities as described in the Environmental Memorandum approved with the SEIR, dated April 12, 2021, and the Product Water Conveyance Facilities as described in the SEIR. These components are the subject of this BA.

Overview of the Original PWM/GWR Project

On October 8, 2015, the M1W Board approved the Original PWM/GWR Project and certified the Final Environmental Impact Report (EIR; State Clearinghouse No. 2013051094). In January 2016, M1W released the Consolidated Final EIR (CFEIR), which included the full text of the Final EIR with changes made to the Draft EIR incorporated, relevant resolutions and notices, and appendices. The Original PWM/GWR Project is the Proposed Project in the CFEIR as modified to include the Alternative Monterey Pipeline and to select the Regional Urban Water Augmentation Project (RUWAP)[2] alignment for the product water conveyance system. The primary objective of the Original PWM/GWR Project is to replenish the Seaside Groundwater Basin with 3,500 acre-feet per year (AFY) of purified recycled water to replace a portion of CalAm's water supply as required by SWRCB orders. The Original PWM/GWR

[2] 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 the former Fort Ord.

Project included a 4.0 million gallons per day (mgd) capacity Advanced Water Purification Facility (AWPF) for treatment and production of purified recycled water, which is subsequently conveyed for injection into the Seaside Groundwater Basin. Injection facilities include a series of shallow and deep injection wells. Once injected into the Seaside Groundwater Basin, treated water mixes with the groundwater present in the Paso Robles and Santa Margarita aquifers and is stored for future extraction. The Original PWM/GWR Project replaces 3,500 AFY of water for CalAm to deliver to its customers in the Monterey District service area.[3] The Original PWM/GWR Project includes ten miles of product water conveyance facilities which extend from the AWPF to Injection Well Facilities. **Figure 1** shows the Original PWM/GWR Project.

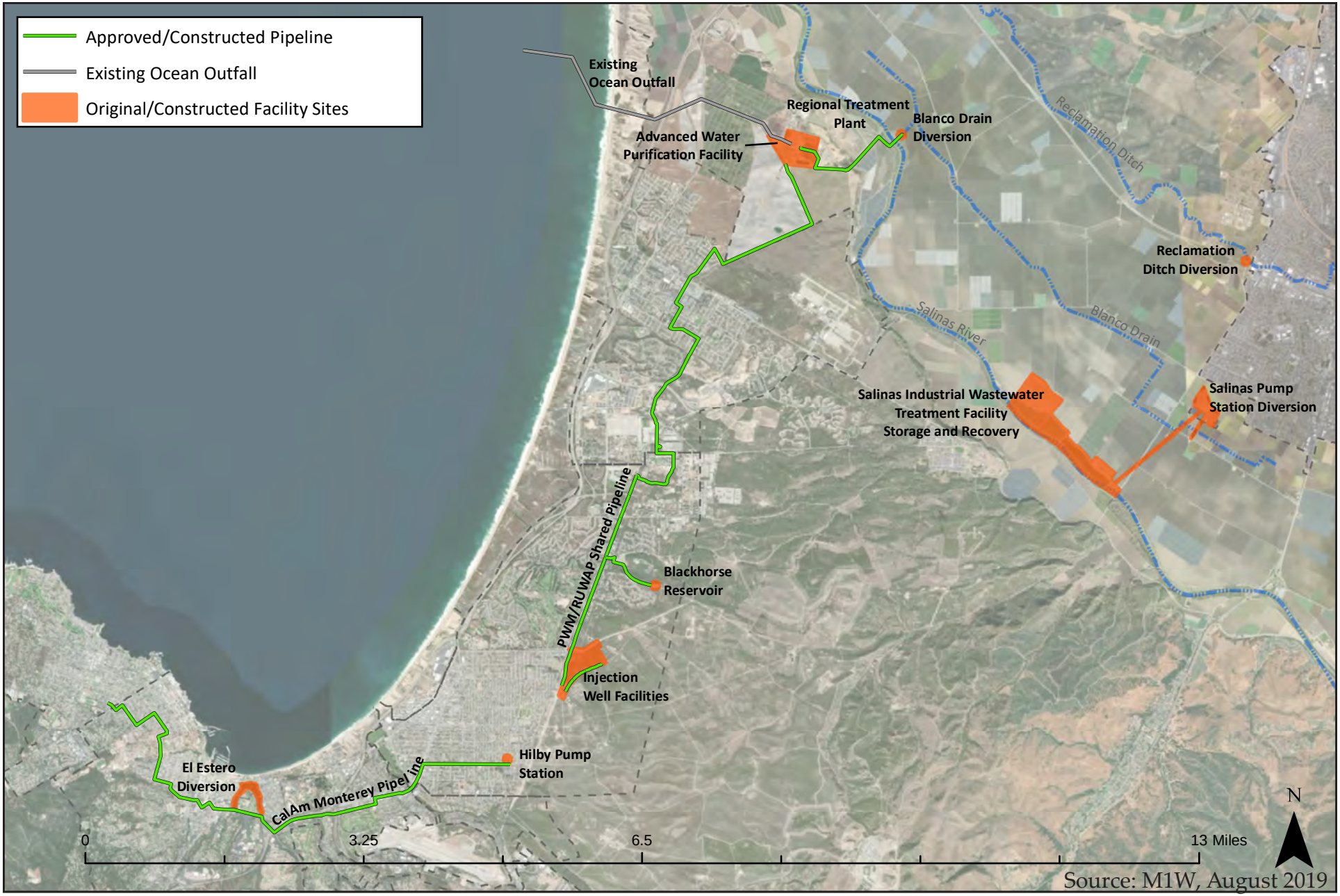
Overview of Addenda to the PWM/GWR EIR

In June 2016, MPWMD prepared an addendum to the CFEIR. Addendum No. 1 to the CFEIR 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 an additional addendum, Addendum No. 2, to the CFEIR. Addendum No. 2, which was prepared to support an 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.

On October 30, 2017, the M1W Board approved Addendum No. 3 to the CFEIR. Addendum No. 3 covered additional modifications to the Original PWM/GWR Project to increase the operational capacity (peak or maximum product water flowrate) of the approved AWPF from 4.0 mgd to 5.0 mgd to enable the delivery of 600 AFY of purified recycled water to Marina Coast Water District (MCWD) for urban landscape irrigation by MCWD customers. The additional recycled water delivery is a component of the approved RUWAP. With that approval, the M1W Board also amended a prior approval for joint use of product water storage and conveyance facilities with MCWD, for the RUWAP and the Original PWM/GWR Projects.

[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 acre feet per year (AFY) of purified recycled water will be injected in the Seaside Groundwater Basin during normal and, up to a total of 1,000 acre-feet (AF) during wet years, 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.



Original PWM/GWR Project

October 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
1

Overview of Supplemental EIR for the Expanded Capacity PWM/GWR Project

The Draft Supplemental Environmental Impact Report (SEIR) for the Exp. PWM/GWR Project was circulated for public review from November 7, 2019, to January 31, 2020. The Final SEIR was initially put before the M1W Board on April 27, 2020. At that time, staff provided resolutions for certification of the Final SEIR and approval of the Exp. PWM/GWR Project, but the M1W Board did not act to certify the Final SEIR nor to approve the Exp. PWM/GWR Project. At the February 22, 2021, Board meeting, the M1W Board approved a motion for staff to proceed with the Exp. PWM/GWR Project considering changes in circumstances since the Final SEIR was completed and requested staff to bring the item back for potential action. At the March 29, 2021, Board meeting, the M1W Board voted to direct staff to update the Final SEIR based on the changes to the Injection Well Facilities description and the associated impact analyses in the Final SEIR, and to bring the project approval and Final SEIR certification to the M1W Board for consideration at a future meeting. On April 26, 2021, the M1W Board certified the Final SEIR, as amended by the Environmental Memorandum on the modifications to the Injection Well Facilities and approved the Exp. PWM/GWR Project with Resolutions 2021-05 and 2021-06.

The CFEIR, associated Addenda, and Final SEIR are accessible online at http://purewatermonterey.org/reports-docs/cfeir/.

An additional Addendum (Addendum No. 4) was prepared in November 2021 to change the Exp. PWM/GWR Project by including an additional replacement well in the Expanded Injection Well area at Well Site #7 and relocating the prior location of the backflush basin as shown in the Final SEIR as certified in April 2021, see **Figure 2**. The M1W Board approved Addendum No. 4 on November 29, 2021.

Overview of Existing Systems

The purpose of the Original PWM/GWR Project was to provide 3,500 AFY of high-quality replacement water to CalAm for delivery to its customers in the Monterey District service area, thereby enabling CalAm to reduce its diversions from the Carmel River system by this same amount and reduce adverse effects of those diversions on the species and habitat in that system.[4] In addition, the Original PWM/GWR Project augments agricultural irrigation water supplies for the farmland in northern Salinas Valley (which was previously served by the existing Castroville Seawater Intrusion Project irrigation system).

The CFEIR includes an in-depth description of the existing wastewater and water infrastructure systems that are relevant to the Original PWM/GWR Project (see Section 2.5 at pg. 2-19). Section 2.5 describes M1W facilities including the Regional Treatment Plant,

[4] CalAm is an investor-owned public utility that serves approximately 38,500 customers in the Monterey Peninsula area.

CITY BOUNDARY
PARCEL BOUNDARIES
APPROVED ORIGINAL PWM/GWR
EXPANDED INJECTION WELL BSA
PRODUCT WATER CONVEYANCE FACILITIES BSA
TEMPORARY AREA OF DISTURBANCE (ACTION AREA)
APPROXIMATE AREA OF PERMANENT DISTURBANCE (ACTION AREA)
PIPELINES AND CONDUITS

Notes:
Permanent disturbance areas for the well and backflush basin sites are approximate. Final siting of permanent facilities will be designed to reduce impacts to federally-listed plant species to the greatest extent feasible based on the results of updated botanical surveys.

In addition to the facilities shown, one monitoring well will be located within the right of way of Eucalyptus Road. Specifically, the monitoring well would be located west of Well Site No. 7 along the portion of Eucalyptus shown within the purple Expanded Injection Well BSA, in the area shown in the black box. The precise location of the monitoring well cannot be determined until further investigations are complete.

Product Water Conveyance Pipeline
Temporary Construction 10-15 ft. wide

City of Seaside
Monterey County

Well Site No. 5
(future)

Current understanding for the location of the monitoring well

Well Site No. 6, including Electrical Building
Laydown Area 300 ft. x 150 ft.
Fenced Yard 120 ft. x 100 ft.

Backflush Basin
Temporary Construction Boundary 500 ft. x 200 ft.
Permanent Footprint 500 ft. x 120 ft.

Well Site No. 7
Laydown Area 300 ft. x 150 ft.
Fenced Yard 120 ft. x 100 ft.

Injection Wells Access Road with pipelines and conduits
Temporary Width 40 ft.
Permanent Width 20 ft.

Well Site No. 1 (existing)

GENERAL JIM MOORE BOULEVARD
EUCALYPTUS ROAD

N
0 500 1,000 2,000 Feet

Biological Study Area Map

June 2022

Expanded PWM/GWR Project
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Figure
2

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.

1.2 Project Goals and Objectives

The primary objectives of the Proposed Action are to reduce discharges of secondary effluent to Monterey Bay and to replenish the Seaside Groundwater Basin to replace CalAm's use of existing water sources. The Exp. PWM/GWR Project would expand the AWPF peak capacity from 5 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). To accomplish these primary objectives, the Exp. PWM/GWR Project would need to meet the following objectives:

1. Be capable of commencing operation, or of being substantially complete, by the end of 2023 or as necessary to meet CalAm's replacement water needs;
2. Be cost-effective such that the Exp. PWM/GWR Project would be capable of supplying reasonably priced water; and
3. Be capable of complying with applicable water quality regulations intended to protect public health.

1.3 Project Description

The Specified Components of the Exp. PWM/GWR Project are located in northern Monterey County, within the City of Seaside within the boundary of the former Fort Ord, as shown in **Figure 2**, except for improvements at the AWPF.

As discussed above, the Exp. PWM/GWR Project 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 Exp. PWM/GWR Project would require new and expanded project facilities, including improvements at the existing AWPF 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 description below includes only those Specified Components of the Exp. PWM/GWR Project for which M1W is pursuing funding with a federal nexus.

Product Water Conveyance Facilities

The Specified Components of the Exp. PWM/GWR Project 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** and **Figure 3** for more detail. The northern part of the pipeline would be located within an existing unpaved access road for utility sites (MCWD water tanks, Sprint/Nextel, and public radio towers). The southern portion of the

pipeline would be located within the existing paved area of Eucalyptus Road, cross through approximately 1,200 feet of central maritime chaparral, central coastal scrub, and ruderal habitats, then under an unpaved road along the border of the Fort Ord National Monument. Eucalyptus Road is closed to vehicles; however, it is frequently used by recreational users. In total, the pipeline would be approximately 2.3 miles extending from the reservoir site past Well Sites #5, #6 and #7 to Well Site #1. The pipeline would be a maximum of 24 inches in diameter. An additional 2,000 feet of pipeline for backflushing wells would also be located generally along the same alignment as the product water pipeline between Well Site #5 and Well Site #7 and is proposed to be installed using horizontal directional drilling methods instead of using open trench (described further below).

The existing Blackhorse Reservoir and the product water conveyance pipeline from the reservoir site to the Expanded Injection Well Area may be jointly used for the PWM/GWR Project and the RUWAP. See **Figure 3** for a detailed depiction of the pipeline connection to the lateral pipeline feeding the Blackhorse Reservoir. The existing product water conveyance pipeline from the existing 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 Original 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 feet per second (Kennedy-Jenks, 2020).

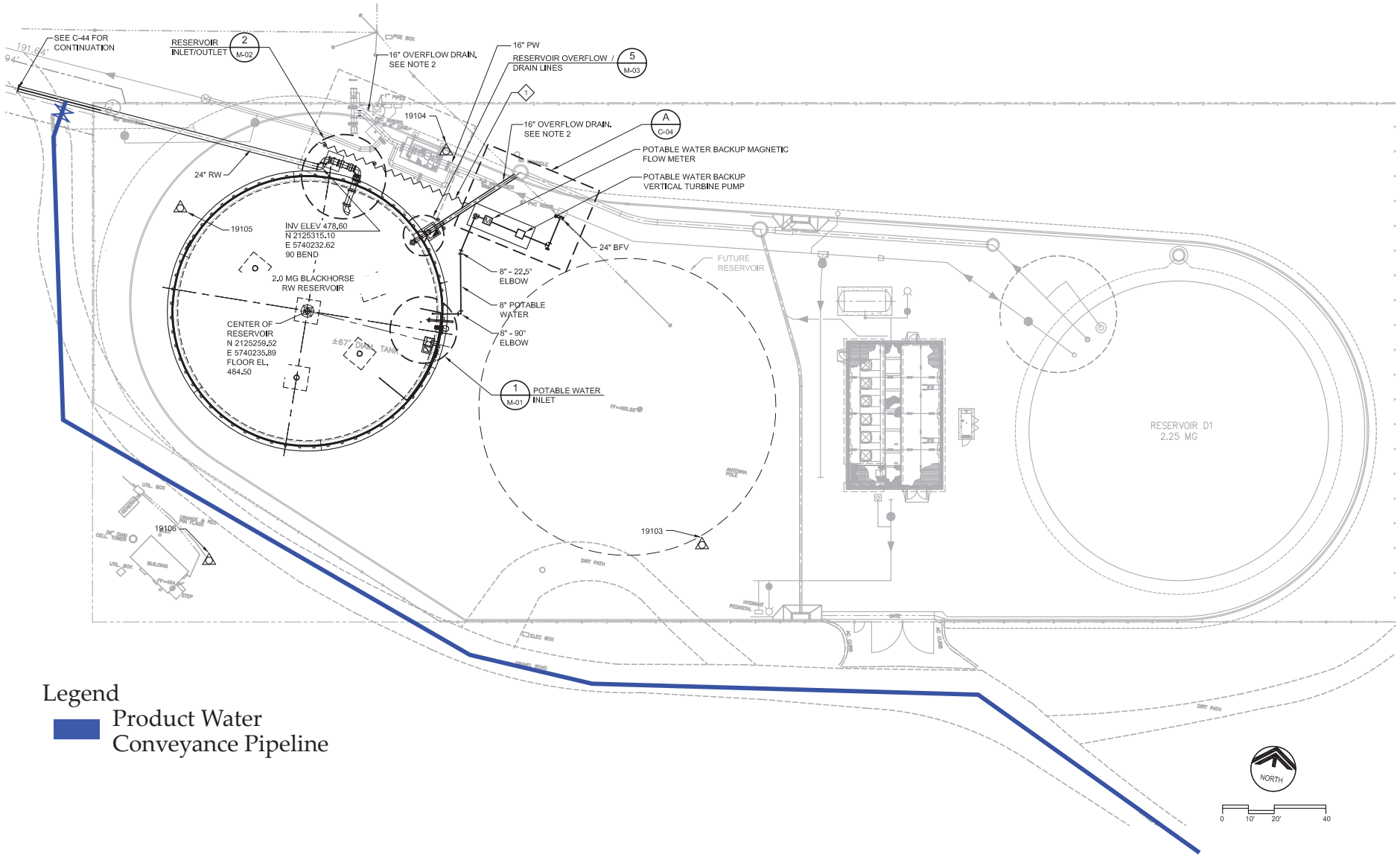
The MCWD Recycled Water Master Plan identifies the need for a future distribution lateral from the tank site to the corner of Eucalyptus Road and Parker Flats Cut-Off. However, this connection is outside the scope of the Exp. PWM/GWR Project.

The 2-million-gallon capacity Blackhorse Reservoir provides operational storage for the conveyance and injection requirements of the Original PWM/GWR Project and the Exp. PWM/GWR Project in addition to the RUWAP irrigation demands and can accommodate the backwashing cycles for all existing and proposed deep injection wells.

Construction

The product water conveyance pipeline would be constructed using open trench methods, except for a portion between Well Site #7 and Well Site #1 which would be built with horizontal directional drilling technique[5]. 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

[5] Horizontal directional drilling requires the excavation of a pit on either end of the pipe alignment that measures approximately 15 feet wide by 50 to 80 feet long (sloping to the existing grade at the far end). A surface-launched drilling rig is used to drill a 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.



Legend

Product Water Conveyance Pipeline

Source: Carollo & M1W, March 2020

Product Water Conveyance Facilities

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Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure 3

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 CFEIR).

Injection Well Facilities

As of May 2022, M1W and MPWMD have completed construction of two additional deep injection wells within the original well area. 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 is located at the northernmost well site (Well Site #1) and the fourth deep injection well is located at the southernmost well site (Well Site #4). No additional approved vadose zone wells are planned or under construction.

The Exp. PWM/GWR Project includes 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 Exp.

PWM/GWR Project, 5,750 AFY on average would be injected into the Seaside Groundwater Basin (and a maximum of up to 5,950 AFY).

The Exp. PWM/GWR Project includes 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, numbered #5 through #7 (named from northeast to southwest). Two new deep injection wells would be constructed and operated one at each Well Sites #6 and #7 as part of this project. Well Site #5 may be the site of another well in future; however, that deep injection well is not currently proposed for funding or construction. No new vadose zone wells are proposed as part of the Exp. PWM/GWR Project.[6]

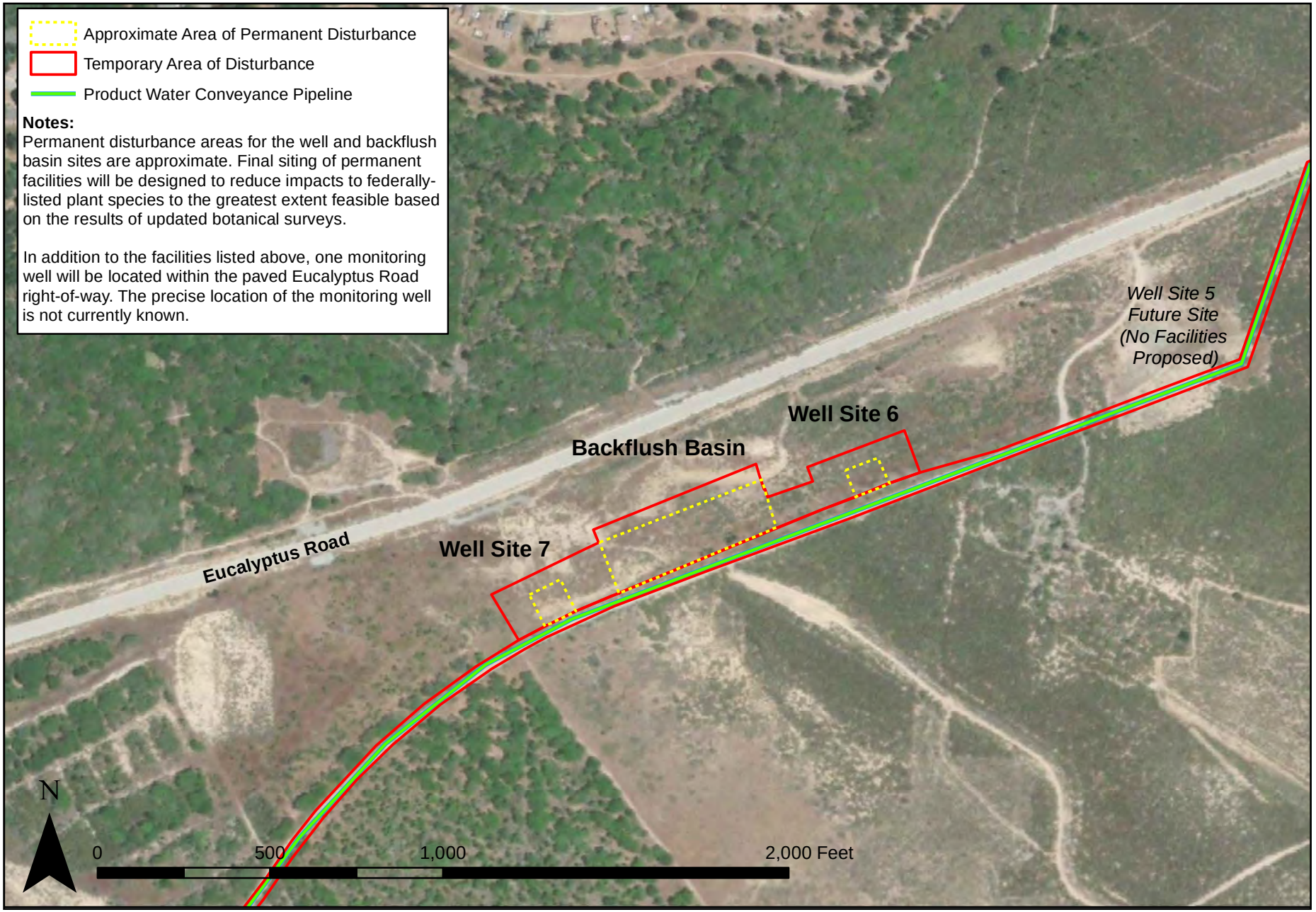
Table 1-2 and **Figure 4** summarize the Injection Well at each of the Well Sites. Please note that the permanent disturbance areas for the well sites shown on **Figure 2** and **Figure 4** are approximate. Final siting of permanent facilities will be designed to reduce impacts to federally-listed plant species to the greatest extent feasible based on the results of updated botanical surveys as described below in **Chapter 4**.

Table 1-2 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 has been approved and constructed and 1 vadose zone well was approved, but not constructed.
#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 has been approved and constructed and 1 vadose zone well was approved but not constructed.
#5	Expanded Injection Well Area	Well Site #5 is a potential site for a future new well.
#6	Expanded Injection Well Area	1 approved, but not constructed deep injection well
#7	Expanded Injection Well Area	1 approved, but not constructed deep injection well.
* For groundwater modeling, the Final SEIR assumed all shallow (vadose zone) injection wells would 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 Exp. PWM/GWR Project is nine total.		

Each injection well site would be equipped with associated backwash pumps and appurtenances. **Figure 5** shows the conceptual design profile of the proposed deep injection wells.

[6] The Original PWM/GWR Project included analysis of eight total injection wells: four shallow and four deep. The Exp. PWM/GWR Project would include up to nine (9) total Injection Wells with up to six deep injection wells and up to three shallow injection wells.



Injection Well Areas

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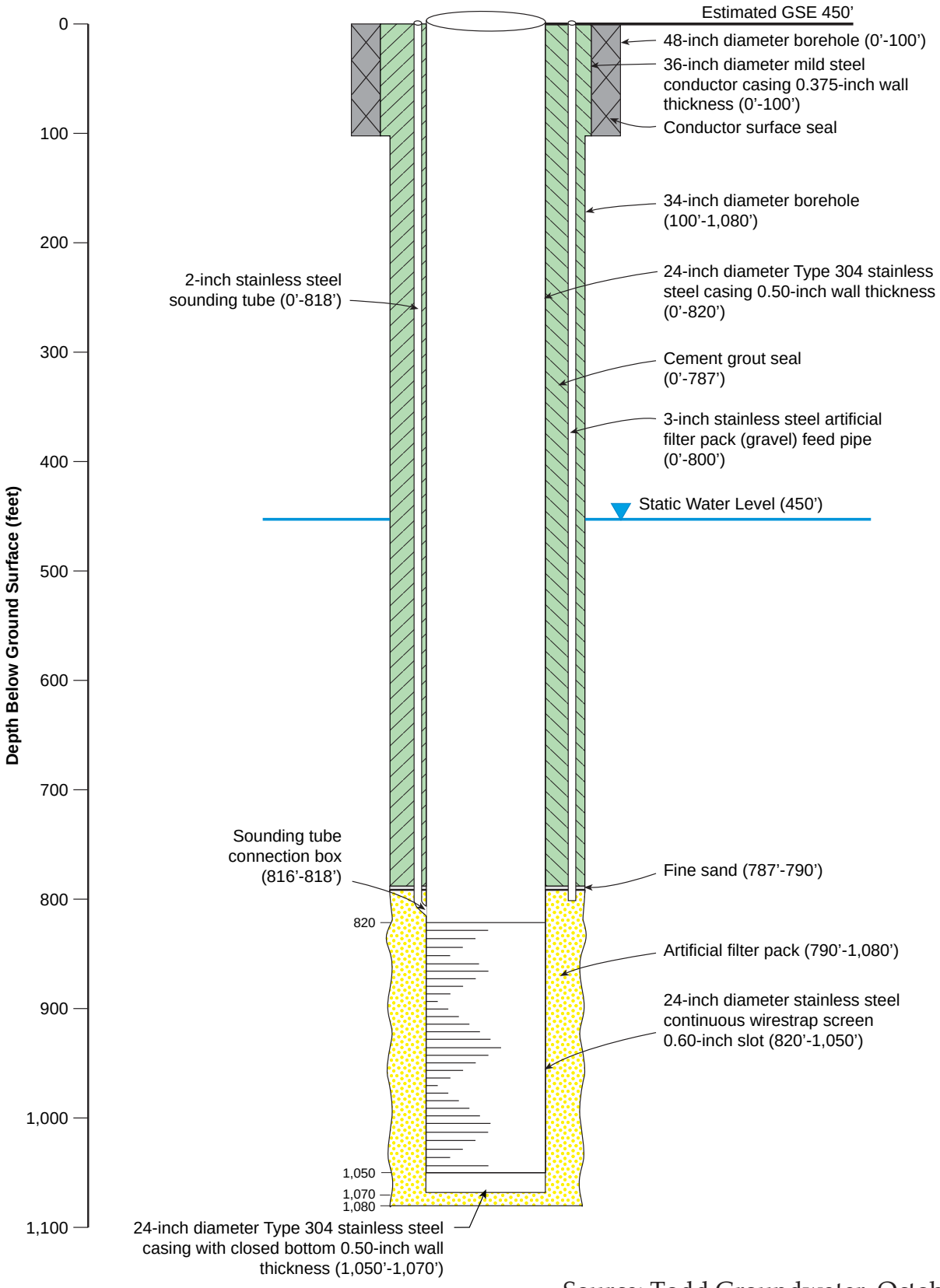
Figure
4



Source: Todd Groundwater, October 2019

Conceptual Design Profile for Deep Injection Well

October 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure 5

One monitoring well will be installed within the paved right-of-way of Eucalyptus Road if required by the SWRCB Division of Drinking Water (**Figure 2**). The monitoring well will not require any aboveground infrastructure besides an approximate 12-inch diameter manhole cover. The monitoring well will extend as far as 1,400 feet below ground surface.

New, small electrical buildings (power supply/transformer and motor control building) would be constructed at each injection well location within the Expanded Injection Well Area (**Figure 4**). The backflush basin will be located between Well Site #6 and Well Site #7. 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 a supervisory control and data acquisition (SCADA) system. In addition to incidental power requirements (instrumentation and monitoring equipment, site lighting, etc.), major power supply and two variable frequency drives would enable backflush of each well separately or both at the same time.

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 Original PWM/GWR Project Final EIR. These methods are included here for full understanding of this project component but have generally not changed since the certification of the Original PWM/GWR Project Final EIR.

Well Construction

Each injection well site would include an approximately 300-ft x 150-ft laydown area for construction, with a final fenced yard of approximately 120-ft x 100-ft (**Figure 2**). The total area of soil disturbance would be approximately 0.4-acre for Wells #6 and #7. Installation of the wells typically follows a two-step process: 1) drilling and logging, and installation; 2) testing and equipping. This section describes these 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.

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 SWRCB - 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 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 approximately 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.

Backflush Basins Construction

Backflush basins are required for disposal of periodic well backflushing cycles, and for disposal of well development and testing water for new or rehabilitated wells. Backflush basins located within the Injection Well Area recharge to the vadose zone. The Original PWM/GWR Project assumed one basin, which was recently constructed at Well Site #4. The backflush cycles 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, potentially with two independent compartments, would be constructed to accommodate the additional well development and backflush water from the Expanded Injection Well Area between Well Sites #6 and #7 as shown on **Figure 4**. Please note that the permanent disturbance area for the backflush basin shown on **Figure 2** and **Figure 4** is approximate. Final

siting of permanent facilities will be designed to reduce impacts to federally-listed plant species to the greatest extent feasible based on the results of updated botanical surveys as described below in **Chapter 4**. The new backflush 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 Pacific Gas and Electric (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 the pump motors for backflushing the deep wells. The following activities would be required to construct the pump motor control and electrical conveyance facilities:

1. excavation, spoilage handling, import and install bedding material, building foundation, trench, place concrete, backfill & compact trench, finish concrete floor of electrical building;
2. 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
3. for electrical buildings, a pre-made electric house, including walls, doors, louvers, roof, and appurtenances, would be delivered to the site, then interior finishes, lighting, HVAC, and electrical equipment and wiring would be installed.

The estimated construction period for these facilities is approximately 6 to 10 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 duct bank, which would run in parallel and near the 14-inch backflush pipeline. The depth of the duct bank 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 SCADA system 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 Original PWM/GWR

Project Final EIR. These methods are included below for reference and have not changed since the certification of the Original PWM/GWR Project Final EIR. The Exp. PWM/GWR Project would change the locations, aquifers (or depth), and injections volumes, increasing the amount of injection through October through March.

Injection wells and associated electrical and mechanical systems would operate 24 hours 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 most likely visit the site on a daily basis, 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 up to 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 scraper machine would be used to scrape the bottom of the pond to increase/restore the percolation rate. The machine would access the site from the existing maintenance roads and ramps into the backflush basin.

One new and seven existing monitoring wells would be used to monitor project performance and compliance with SWRCB – Division of Drinking Water regulations. Because the Exp. PWM/GWR Project would recharge two separate aquifers (Paso Robles and Santa Margarita Aquifers), monitoring wells would be sampled to satisfy regulatory requirements for monitoring of subsurface conditions for a groundwater replenishment project. No changes to the operational vehicle trips and employees would occur (see Table 2-10 of the CFEIR).

1.4 Schedule for Construction

Construction is proposed to start in October 2022 and be completed by 2024.

1.5 Summary of Consultation to Date

A BA was submitted to the Service on May 18, 2016, for the Original PWM/GWR Project. Supplemental information, including additional survey results, was submitted to the Service on June 23, 2016, and August 16, 2016. The Service issued a BO (2016-F-0523) on December 20, 2016. The BO made the following conclusions:

California Red-legged Frog

The Original PWM/GWR Project may result in mortality of a few adult or juvenile CRLF. The Service expects minimal effects to the quality of CRLF habitat because most of the Original PWM/GWR Project would be implemented in existing developed or highly disturbed areas. The Service expects little to no long-term effect to the local population of CRLF. In addition, the Service does not expect that the Original PWM/GWR Project would have substantial effects to the population stability of the species within or the habitat connectivity across recovery core area 19.[7]

Monterey Spineflower

The Service expects that the Original PWM/GWR Project would result in destruction of up to 0.3-acre of known occupied Monterey spineflower habitat and possibly additional habitat occupied by seed. At least 0.1-acre of this habitat would either be avoided or replaced. Habitat that would not necessarily be either avoided or replaced because it occurs within designated development parcels of the former Fort Ord and is not considered essential to conservation of the species. The Service does not expect that the small amount of habitat destruction and mortality likely due to the Original PWM/GWR Project would have substantial effects to recovery of the species.

Monterey Gilia

The Service expects that the Original PWM/GWR Project would result in destruction of up to 0.003-acre of known occupied Monterey gilia habitat and possibly additional habitat occupied by seed. Based on 2016 surveys, the Service estimates that approximately 87 adult plants may be killed, but because Monterey gilia is an annual plant, the number of adult plants present during project construction may vary from this estimate. All of the known occupied habitat for this species within the Original PWM/GWR Project area is on designated development parcels of the former Fort Ord and is not considered essential to conservation of the species (U.S. Army Corps of Engineers [ACOE], 1997). The Service does not expect that the small amount

[7] The Original PWM/GWR Project area is within Recovery Unit 5 (Central Coast) and overlaps the southern end of Recovery Core Area 19 (Watsonville Slough-Elkhorn Slough; Salinas River-Pajaro River) for CRLF (Service 2002). Core area 19 was designated because it is currently occupied by the species, provides connectivity between occupied areas, and is inhabited by a stable population that may provide dispersing individuals that colonize other areas.

of habitat destruction and mortality likely due to the proposed action would have substantial effects to recovery of the species.

1.6 Fort Ord Habitat Management Plan

As previously stated, the Specified Components of the Exp. PWM/GWR Project are located within the former Fort Ord. The U.S. Army's decision to close and dispose of the Fort Ord military base was considered a major federal action that could affect listed species under the ESA. In 1993, the Service issued a BO on the disposal and reuse of former Fort Ord requiring that a Habitat Management Plan (HMP) be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species (Service, 1993, updated to Service, 2017). The HMP was prepared to assess impacts on vegetation and wildlife resources and provide mitigation for their loss associated with the disposal and reuse of former Fort Ord (ACOE, 1997).

The HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord; parcels are designated as "development with no restrictions," "habitat reserves with management requirements," or "habitat reserves with development restrictions." In addition, development parcels located adjacent to habitat reserve areas are considered "borderland development areas" with resource conservation and management requirements along the development/reserve interface, such as development of fuel breaks and limitations to vehicle access. The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation is required for impacts to species and habitats considered in the HMP. This plan has been approved by the Service; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The Specified Components of the Exp. PWM/GWR Project are located within designated "development" parcels within the jurisdiction of the City of Seaside and County of Monterey. Parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within the development parcels that may be salvaged for use in restoration activities in reserve areas (Service, 2017 and ACOE, 1997).

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat

management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP are obligated to implement those specific measures through the HMP and through deed covenants.

However, the HMP does not provide specific authorization for incidental take of listed wildlife species to existing or future non-federal land recipients under the ESA. The Proposed Action is seeking Federal funding, and, therefore, requires compliance with Section 7 of the ESA. The City of Seaside and County of Monterey, as well as all other land recipients, are required to implement HMP requirements in accordance with the deed covenants, which apply to the HMP parcels within the Specified Components of the Exp. PWM/GWR Project. The HMP and 2017 Programmatic BO require the identification of sensitive biological resources within development parcels that may be salvaged for use in restoration activities in habitat reserve areas. In addition, pursuant to HMP and deed covenants, the local land use jurisdictions that receive disposed land with restrictions or management guidelines identified in the HMP, including the County of Monterey, are required to prepare their respective resource management plans (RMPs) within six (6) months of land transfer and acquisition. However, in 1997, instead of preparing RMPs, the local jurisdictions jointly initiated a base-wide incidental take permit application process with the Service that included the preparation of a habitat conservation plan, which effectively incorporated the requirements of the HMP. Thus, in coordination with the Service, over a period of over 20 years, the local jurisdictions prepared a Draft Fort Ord Habitat Conservation Plan (HCP). The HMP and deed covenants also require that the local land use jurisdictions, including the City of Seaside, which receive development parcels that abut habitat reserve areas prepare a Borderland Management Plan.

The BA for the Original PWM/GWR Project and the subsequently issued BO were prepared under the assumption that the HCP would be approved. However, in June 2020, the local jurisdictions decided not to approve the Fort Ord HCP and not collectively pursue base-wide incidental take permits. As a result, the Service has requested that the local jurisdictions initiate the steps necessary to comply with the HMP now that the Fort Ord HCP and base-wide incidental take permits are no longer proposed.

The County of Monterey is currently preparing their RMP and anticipates approval by the Service at the end of 2022, which would comply with the requirements of the HMP. The status of a RMP and Borderland Management Plan for the City of Seaside is unknown. If the City of Seaside and the County of Monterey are in compliance with the HMP and 2017 Programmatic BO, no additional avoidance and minimization measures for federally listed HMP species would be required for impacts within the Specified Components of the Exp. PWM/GWR Project. However, if the City of Seaside and the County of Monterey are not in compliance with the HMP and 2017 Programmatic BO, additional avoidance and minimization measures

may be required. It is expected that those avoidance and minimization measures to be adopted by the local agencies for Monterey spineflower would be the same or comparable to those in the draft HCP and in this Biological Assessment.

1.7 Document Preparation History

DD&A Senior Environmental Scientists, Matt Johnson and Jami Davis were the primary authors of this BA, with assistance from DD&A Deputy Project Manager, Diana Buhler. All DD&A staff may be reached at:

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Chapter 2. Study Methods

The following sections discuss sources used to develop information on the proposed Action Area. Study methods and sources used consist of a review of technical reports prepared for the Proposed Action, review of a list of Threatened and Endangered species with the potential to be affected by the Proposed Action as provided by the Service (**Appendix A**), review of existing documentation relevant to the Proposed Action, field reconnaissance, protocol-level surveys, and evaluation of impacts to identified resources.

2.1 Biological Study Area and Action Area

Figure 2 shows the Biological Study Area (BSA) and the Proposed Action Area. The BSA is located directly adjacent to the Original PWM/GWR approved injection well site and includes the Proposed Action Area, the development parcels on the former Fort Ord between Eucalyptus Road and the unpaved road along the border of the Fort Ord National Monument, and areas within and adjacent to the existing Blackhorse Reservoir Facility. The Proposed Action Area includes all areas where permanent and temporary impacts are expected to occur as a result of the project activities. Components located at the AWPF are not included in the BSA or Proposed Action Area because they will be contained within the existing developed AWPF.

2.2 Listed and Proposed Species Potentially in the Action Area

In order to determine which federally listed or proposed species are known to, or have the potential to, occur in the Action Area, the following were reviewed: the Service's Information for Planning and Consultation (IPaC) Resource List for the project site (**Appendix A**; Service, 2022a) and the California Natural Diversity Data Base (CNDDB) occurrence reports (California Department of Fish and Wildlife [CDFW], 2022). From these sources, a table of federally listed or proposed species known, or with the potential to occur, in the Action Area was compiled. **Table 2-1** lists the federally listed plant species along with their legal status, habitat requirements, a determination of the presence of suitable habitat, and a brief statement of their likelihood to occur within the Action Area. **Table 2-2** lists the federally listed wildlife species along with their legal status, habitat requirements, a determination of the presence of suitable habitat, and a brief statement of their likelihood to occur within the Action Area. Only the species identified to occur within or immediately adjacent to the Action Area during the 2019 and 2022 surveys (Monterey spineflower and Monterey gilia) are discussed in **Section 4** of this BA. All other species are assumed absent within the Action Area based on the species-specific reasons presented in **Tables 2-1** and **2-2**.

Table 2-1 Federally Listed and Proposed Plant Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence Within Action Area and BSA
Astragalus tener var. *titi*	Coastal dunes milk-vetch	E	Coastal bluff scrub on sandy soils, coastal dunes, and mesic areas of coastal prairie at elevations of 1-50 meters. Annual herb in the Fabaceae family; blooms March-May.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Arenaria paluddicola	Marsh sandwort	E	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Chorizanthe pungens var. *pungens*	Monterey spineflower	T/CH	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-June.	P	**Present:** Observed within the Action Area during surveys in 2019 and 2022. This species was also identified in other areas of the BSA surveyed in 2019 and 2022, and suitable habitat is present in unsurveyed areas of the BSA.
Erysimum menziesii ssp. menziesii	Menzies' wallflower	E	Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-June.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Gilia tenuiflora ssp. *arenaria*	Monterey (sand) gilia	E	Maritime chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	P	**Present:** Not observed within the Action Area during surveys in 2019 or 2022; however, this species was observed immediately adjacent to the Action Area; and suitable habitat is present in unsurveyed areas of the BSA.
Hesperocyparis goveniana	Gowen cypress	T	Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.

Table 2-1 Federally Listed and Proposed Plant Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence Within Action Area and BSA
Lasthenia conjugens	Contra Costa goldfields	E/CH	Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Layia carnosa	Beach layia	E	Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Lupinus tidestromii	Tidestrom's lupine	E	Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June. Only Monterey County plants are state-listed Endangered as var. *tidestromii*.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Piperia yadonii	Yadon's piperia (rein orchid)	E	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family;	P	**Not Present:** Not identified within the Action Area. Suitable habitat is present in unsurveyed areas of the BSA.
Potentilla hickmanii	Hickman's cinquefoil	E	Coastal bluff scrub, closed-cone coniferous forests, vernally mesic meadows, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.
Trifolium trichocalyx	Monterey clover	E	Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June.	A	**Not Present:** Not identified within the Action Area. No suitable habitat within the BSA.

Table 2-1 Federally Listed and Proposed Plant Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence Within Action Area and BSA
Status Definitions E = Listed as Endangered under the federal Endangered Species Act T = Listed as Threatened under the federal Endangered Species Act C = Candidate for listing under the federal Endangered Species Act CH = Critical Habitat designated or proposed - does not necessarily mean BSA is within designated critical habitat or constituent elements are present **Habitat Definitions** A = Habitat absent P = Habitat present **Rationale Definitions** Present = Species is known to occur within the Action Area Potential = Species has a potential to occur within the Action Area based on presence of suitable habitat and known occurrences of the species within the vicinity Unlikely = Appropriate habitat is present within the Action Area, but species is not likely to be present based on the species-specific reason provided Not Present = Appropriate habitat is not present within the Action Area and/or species was not identified during focused surveys **Location Definitions** Action Area = all areas where permanent and temporary impacts are expected to occur as a result of the project activities BSA = Biological Study Area; includes the Proposed Action Area, the development parcels on the former Fort Ord between Eucalyptus Road and the unpaved road along the border of the Fort Ord National Monument, and areas within and adjacent to the existing Blackhorse Reservoir Facility FSA = Focused Survey Area; areas where focused botanical surveys were conducted in 2019 and/or 2022; includes the entire Action Area and other limited areas of the BSA					

Table 2-2 Federally Listed and Proposed Wildlife Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence within BSA and Action Area
INVERTEBRATES					
Branchinecta lynchi	Vernal pool fairy shrimp	T	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	A	**Not Present:** No CNDDB occurrences within quads searched. California fairy shrimp (*Linderella occidentalis*) are known to occur in vernal pools in the vicinity of the BSA, but no vernal pool fairy shrimp have been identified. No habitat is present within the BSA.
Danus plexippus	Monarch Butterfly	C	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine, and acacia trees. Overwintering habitat for this species within the	A	**Not Present:** No suitable habitat within the BSA.
Euphilotes enoptes smithi	Smith's blue butterfly	E	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium.*	A	**Not Present:** The host plants for this species were not identified within the Action Area during surveys in 2019 or 2022. No other suitable habitat for host plants within unsurveyed areas of the BSA.
AMPHIBIANS					
Ambystoma californiense	California tiger salamander	T/CH	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	P	**Unlikely:** No breeding habitat is present within the BSA. Several breeding locations are known within the former Fort Ord, and a small portion of the BSA and Action Area are located approximately 2.1 km from a known breeding pond (Fort Ord Pond 8). Although this small portion of the project is within the known dispersal distance for this species (2.2 km), the Action Area is constricted to the existing boundaries of Eucalyptus Road in this area and does not provide suitable upland habitat for this CTS.

Table 2-2 Federally Listed and Proposed Wildlife Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence within BSA and Action Area
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	E	Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir, and wet meadows. This is an isolated subspecies which occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation.	A	**Not Present:** No suitable habitat within the BSA. BSA is outside of the currently known range for this species.
Rana draytonii	California red-legged frog	T/CH	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	A	**Not Present:** No suitable breeding or upland habitat within or adjacent to the BSA. The nearest known breeding occurrence is located over 5 miles from the BSA.
BIRDS					
Brachyramphus marmoratus	Marbled murrelet (nesting)	T	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	A	**Not Present:** No suitable habitat within the BSA.
Charadrius alexandrinus nivosus	Western snowy plover	T/CH	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly, or friable soil substrate for nesting.	A	**Not Present:** No suitable habitat within the BSA.
Empidonax traillii extimus	Southwestern willow flycatcher (nesting)	E	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima),* or both.	A	**Not Present:** No suitable habitat within the BSA.

Table 2-2 Federally Listed and Proposed Wildlife Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence within BSA and Action Area
Gymnogyps californianus	California condor	E/CH	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19-mile commute one way). Nest sites in cliffs, crevices, potholes.	A	**Not Present:** No suitable habitat within the BSA.
Sterna antillarum browni	California least tern (nesting colony)	E	Sea beaches, bays; large rivers, bars.	A	**Not Present:** No suitable habitat within the BSA.
Vireo bellii pusillus	Least Bell's vireo	E	Riparian habitats. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	A	**Not Present:** No suitable habitat within the BSA.
FISH					
Eucyclogobius newberryi	Tidewater goby	E/CH	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	A	**Not Present:** No suitable habitat within the BSA.

Table 2-2 Federally Listed and Proposed Wildlife Species Documented to Occur in the Project Region

Scientific Name	Common Name	Status	General Habitat Description	Habitat Present/ Absent	Presence within BSA and Action Area
Status Definitions E = Listed as Endangered under the federal Endangered Species Act T = Listed as Threatened under the federal Endangered Species Act C = Candidate for listing under the federal Endangered Species Act CH = Critical Habitat designated or proposed - does not necessarily mean BSA is within designated critical habitat or constituent elements are present **Habitat Definitions** A = Habitat absent P = Habitat present **Rationale Definitions** Present = Species is known to occur within the Action Area Potential = Species has a potential to occur within the Action Area based on presence of suitable habitat and known occurrences of the species within the vicinity Unlikely = Appropriate habitat is present within the Action Area, but species is not likely to be present based on the species-specific reason provided Not Present = Appropriate habitat is not present within the Action Area and/or species was not identified during focused surveys **Location Definitions** Action Area = all areas where permanent and temporary impacts are expected to occur as a result of the project activities BSA = Biological Study Area; includes the Proposed Action Area, the development parcels on the former Fort Ord between Eucalyptus Road and the unpaved road along the border of the Fort Ord National Monument, and areas within and adjacent to the existing Blackhorse Reservoir Facility				

2.3 Data Sources

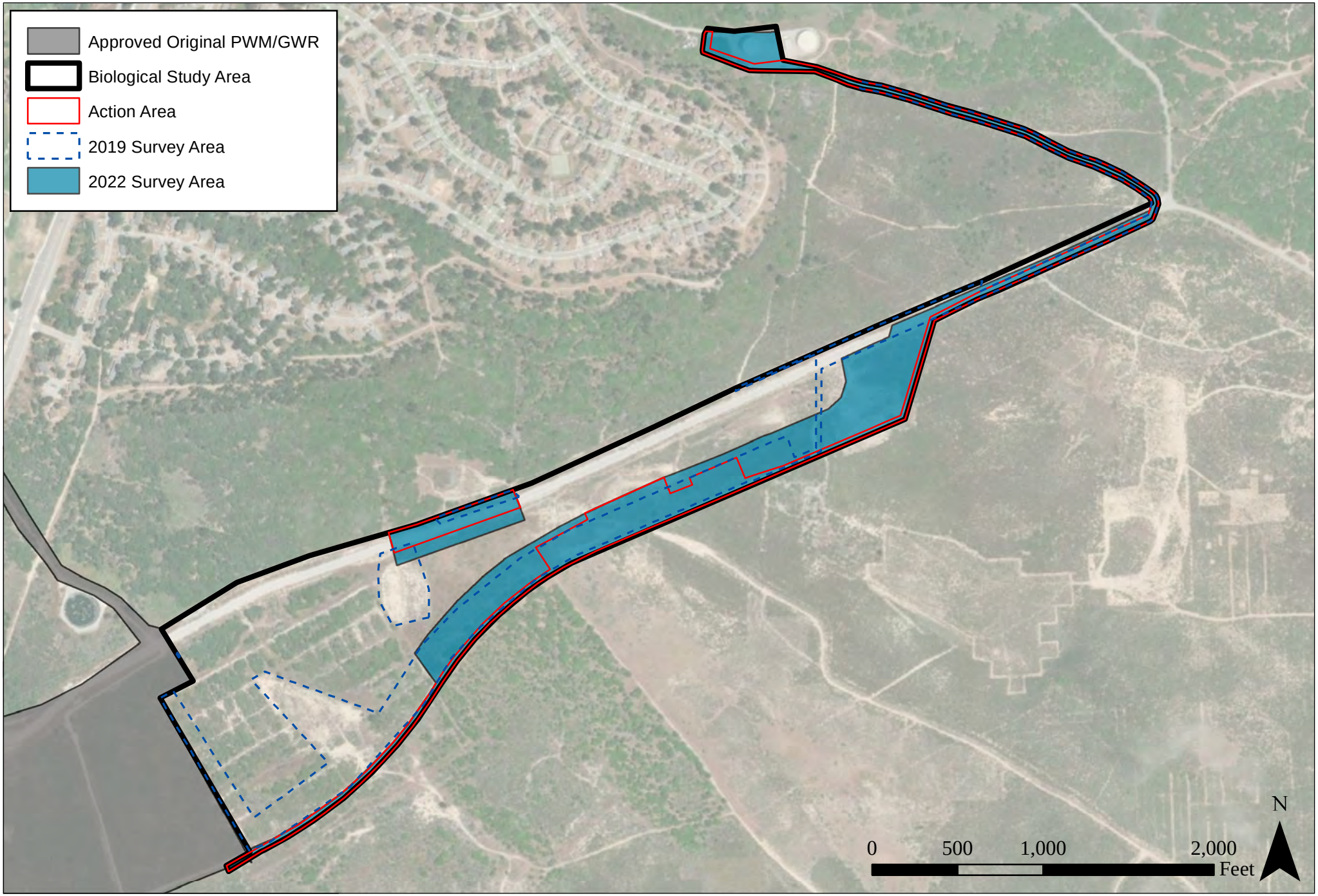
The primary literature and data sources reviewed in order to determine the occurrence or potential for occurrence of special-status species within the Action Area are as follows: current agency status information from the Service for species listed, proposed for listing, or candidates for listing as threatened or endangered under the ESA, the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2019); and the CNDDB RareFind occurrence reports (CDFW, 2022). The CNDDB RareFind occurrence reports were reviewed from the Seaside quadrangle and the surrounding quadrangles (Monterey, Marina, Salinas, Spreckels, Soberanes Point, Mt. Carmel, Carmel Valley).

Botanical Resources

The generalized vegetation classification schemes for California described by Holland (1986) and Sawyer et al. (2009) were consulted in classifying the vegetation within the BSA. The final classification and characterization of the vegetation within the BSA is based on field observations and the List of Vegetation Alliances and Associations (or Natural Communities List) (Sawyer et al., 2009).

Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Howitt and Howell, 1964 and 1973; Munz and Keck, 1973; Hickman, 1993; Baldwin, et al., 2012; Matthews and Mitchell, 2015; Jepson Flora Project, 2019). All plants observed within the Action Area were identified using keys and descriptions in Baldwin, et al., (2012) and Matthews and Mitchell (2015). Scientific nomenclature for plants in this report follows Baldwin, et al., (2012) and common names follow Matthews and Mitchell (2015). A full botanical inventory was not recorded for the BSA; however, the dominant species within each habitat were recorded and all plant species encountered were identified to eliminate them as being special-status species.

Denise Duffy & Associates, Inc. (DD&A) conducted focused botanical surveys within the boundaries of the Action Area and other areas of the BSA requested by M1W in 2019 and 2022 (**Figure 6**). Surveys followed the applicable guidelines outlined in: *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (Service, 2000), *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and *CNPS Botanical Survey Guidelines* (CNPS, 2001).



Survey Area Map

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
6

Wildlife Resources

The following literature and data sources were reviewed: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et. al., 2016;); California Wildlife Habitat Relationships life history accounts and range maps (CDFW, 2019b); and general wildlife references (Stebbins, 2003).

2.4 Personnel and Survey Dates

Numerous biological surveys have been conducted within the BSA by DD&A biologists, Matt Johnson, Patric Krabacher, Max Hofmarcher, Liz Camilo, and Kimiya Ghadiri. The dates for each of these surveys and their location (i.e., within the entire BSA or portions of the BSA) are outlined in **Table 2-3**.

Table 2-3 Survey Dates

Survey Type	Location	Date(s)
Reconnaissance-level wildlife and general habitat survey	BSA	April 19, 22, 23, 24; May 6, 14, 15, 17, 28; July 16, 17, 19; August 7, 12
Focused spring-flowering plant species survey	2019 Survey Area	April 19, 22, 23, 24; May 6, 14, 15, 17, 28
Focused summer-flowering plant species survey	2019 Survey Area	July 16, 17, 19; August 7, 12
Focused spring-flowering plant species survey	2022 Survey Area	March 30; May 9, 16

Focused Botanical Survey

Prior to conducting focused botanical surveys, an analysis of special-status plant species known to occur within the vicinity was conducted to determine the potential for their presence within the BSA based on presence of suitable habitats, soils, elevation range, and currently known geographic range. An effort was made to identify local reference populations for species determined to have the potential to occur within the BSA in order to determine the appropriate survey timing (i.e., peak bloom) for these species. Reference populations were identified for several species, such as Monterey spineflower, Monterey gilia, Yadon's piperia (*Piperia yadonii*), and Menzie's wallflower (*E. menziesii*). Identified reference populations were checked on an approximately weekly basis from March until the time of the survey to ensure these species would be in peak bloom during the time of the survey.

DD&A biologists surveyed portions of the BSA (**Figure 6**) for special-status plant species in accordance with the regulatory protocols identified above. Although the entire BSA was not surveyed, surveys conducted in 2022 included the entire Action Area and immediately adjacent areas and surveys in 2019 partially overlapped with the Action Area. The data presented in **Appendix B** represents a combination of the data collected in both years. Focused botanical surveys were conducted in March, April, July, and August 2019, and in March and May 2022 during the appropriate blooming period for special-status species likely to be found in their

respective habitats. Where identified, the locations of any special-status plant species were mapped using a Trimble® Geo 7x Series global positioning system (GPS) with an external Zephyr Model 2 antenna or delineated on an aerial and digitized in office.

Individual counts were made for all special-status species populations composed of less than five individuals. Any populations greater than five were mapped as polygons. Additionally, Monterey spineflower populations consisting of greater than five individuals were characterized according to the absolute percent of cover. The density classes used for percent cover were:

- Low (< 33 percent absolute cover),
- Medium (33-66 percent absolute cover), and
- High (66-100 percent absolute cover).

GPS data defining the population boundaries and/or point location(s), were exported to shapefile format. Shapefiles were then imported into the Geographic Information System (GIS) ESRI® ArcGIS 10.6/ArcGIS Pro 2.9 software platform and overlaid on high-resolution aerial photography/satellite imagery and other background data.

Protocol-Level Wildlife Surveys

Based on the lack of suitable habitat for special-status wildlife species within the BSA and Action Area, it was determined that protocol-level surveys to determine presence or absence were not necessary. There are two protocol-level surveys for federally listed species that could be applicable to the Proposed Action – surveys for the CRLF and California tiger salamander (CTS; *Ambystoma californiense*). However, there is substantial data for the ponds on the former Fort Ord within the vicinity of the Proposed Action due to regular monitoring for CTS by the U.S. Army. As noted within Table 2-2, the nearest CRLF breeding pond is over five miles from the BSA, and although a very small portion of the Action Area is within 2.2 km of a known CTS breeding location, project components within this area are confined to Eucalyptus Road and suitable upland habitat is not present. Therefore, protocol-level surveys for these species are unnecessary and no further discussion of these species is provided in this BA.

2.5 Agency Coordination and Professional Contacts

- In 2016 the SWRCB, conducted consultation with the Service, National Marine Fisheries Service (NMFS) and the State Historic Preservation Officer (SHPO). Successful completion of these consultations enabled M1W to apply for and receive funding from the SRF for the Original PWM/GWR Project.

- A BA was submitted to the Service on May 18, 2016, for the Original PWM/GWR Project. Supplemental information, including additional survey results, was submitted to the Service on June 23, 2016, and August 16, 2016. The Service issued a BO (2016-F-0523) on December 20, 2016. Please refer to the 2016 BA for agency coordination for the Original PWM/GWR Project.

- The EPA submitted a Request for Concurrence Letter to the NMFS on November 8, 2016. The NMFS issued a Letter of Concurrence (WCR-2016-5504) on December 5, 2016, that the Original PWM/GWR Project is not likely to adversely affect species listed as threatened or endangered (specifically south-central California coast steelhead [*Oncorhynchus mykiss*]), critical habitats designated under the ESA, or essential fish habitat.

- The SWRCB submitted a Request for Concurrence Letter to the SHPO on January 28, 2016. The SHPO issued a Letter of Concurrence (EPA_2016_0304_001) for the Original PWM/GWR Project on April 19, 2016.

- The U.S. Bureau of Reclamation prepared an Environmental Assessment (EA) dated May 2017 and adopted Findings of No Significant Impact (FONSI), to comply with the National Environmental Policy Act (NEPA) for Title XVI funds to be awarded to the Original PWM/GWR Project

- The Office of National Marine Sanctuaries prepared an EA and adopted a FONSI in April 2019 to comply with NEPA for their authorization of M1W's National Pollutant Discharge Elimination System (NPDES) December 2018 permit amendment.

- Addenda to the CFEIR were prepared in June 2016, February 2017, and October 2017. Please refer to Section 1.1. above for details regarding each Addendum.

- A Draft SEIR for the Exp. PWM/GWR Project was circulated for public review from November 7, 2019, to January 31, 2020. On April 26, 2021, the M1W Board certified the Final SEIR, as amended by the Environmental Memorandum on the modifications to the Injection Well Facilities and approved the Exp. PWM/GWR Project with Resolutions 2021-05 and 2021-06. Addendum No. 4 is currently in progress to change the Exp. PWM/GWR Project by including an additional replacement well in the Expanded Injection Well area at Well Site #7 and relocating the prior location of the backflush basin as shown in the Final SEIR.

- A Resource List for the project site was obtained from the Service's IPaC Website on October 13, 2021 (Service, 2021a).

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Chapter 3. Results: Environmental Setting

3.1 Description of Existing Biological and Physical Conditions

Proposed Action Region

The project region is located near the confluence of the San Francisco Bay, Central Coast, and South Coast Range floristic provinces; the flora of Monterey County is among the most diverse in California. The Monterey Bay region represents the population range limits of many rare plant species that are endemic to northern and southern portions of the state. Located between the Salinas and Carmel River watersheds, the climate is Mediterranean with average annual precipitation ranging from 12 to 20 inches and annual temperatures averaging 59 degrees Fahrenheit.

The BSA is located in Monterey County, California within the 27,838-acre former Fort Ord. Lands within the former Fort Ord are generally characterized by either undeveloped open space areas, consisting mostly of maritime chapparal, coast live oak woodland, and grassland habitats, or urbanized development, consisting of abandoned military buildings, military residential housing, educational institutions, government office buildings, and recently constructed homes and commercial buildings.

In general, the BSA is situated in level to gently sloped topography within two miles of the ocean, with elevations ranging from approximately 400 feet above sea level near the proposed injection well facilities to 500 feet above sea level at the proposed connection at the Blackhorse Reservoir. The BSA is directly adjacent to the Original PWM/GWR Project's approved injection well site (**Figure 2**).

Action Area

The Action Area evaluated for this BA includes all areas where permanent and temporary impacts are expected to occur as a result of the project activities (**Figure 2**). **Table 3-1** identifies the construction area of disturbance of permanent footprint of each project component. Detailed descriptions of each component are presented in Section 1.3 of this document. Please note that the permanent disturbance area for the injection wells and backflush basin shown on **Figure 2** and **Figure 4** is approximate. Final siting of permanent facilities will be designed to reduce impacts to federally-listed plant species to the greatest extent feasible based on the results of updated botanical surveys as described below in **Chapter 4**.

Table 3-1 Construction Area of Disturbance and Permanent Footprint

Project Component	Construction Boundary (feet)		Permanent Component Footprint (feet)			
	Length	Width	Length	Width	Maximum Height	Maximum Depth
Product Water Conveyance Pipeline from Blackhorse Reservoir to future Well Site #5	5,280	10-15	5,280	<6	0	10
Well Site #6 Facilities including one deep injection well, motor control building, & transformer	300	150	120	100	15	1,050
Well Site #7 Facilities including one deep injection well, motor control building, & transformer	300	150	120	100	15	1,050
Backflush Basin	500	200	500	120	2-3 for pipe outlet; 20 for one light post	15
One monitoring well	100	100	3	3	0	1,400
Access Roads to Injection Wells, including underground pipelines listed separately & electrical	8,400	40	8,400	20	0	10
Purified water, backflush pipeline & electrical conduit from Well Site #5 to Well Site #1	4,600	10-15	4,600	<6	0	10
Electrical conduit along General Jim Moore Blvd & (if needed) Eucalyptus Rd.	560	10	560	3	0	6
Source: Monterey One Water, Alison Imamura, Principal Engineer, October 2019 and September 2021.						

Physical Conditions

Soils

The SSURGO Database (U.S. Department of Agriculture-Natural Resources Conservation Service, 2015) identifies two map units within the BSA. The majority of the BSA is within the Baywood Sand map unit, while a small area surrounding the existing Blackhorse Tanks are within the Oceano map unit. The SSURGO Database description and a map (see Figure 3-15) of these units is provided in the 2016 BA for the Original PWM/GWR Project.

Hydrology

The Proposed Action is located along the western margin of the Coast Range and the climate is dominated by the Pacific Ocean, which is located approximately two miles from the BSA. The region is characterized by moderate coastal climate with mild, wet winters and generally dry summer days, which are often overcast or have coastal fog and cool temperatures. Rainfall occurs primarily between November and April. The average rainfall in other areas of the county varies but is approximately 18 inches per year.

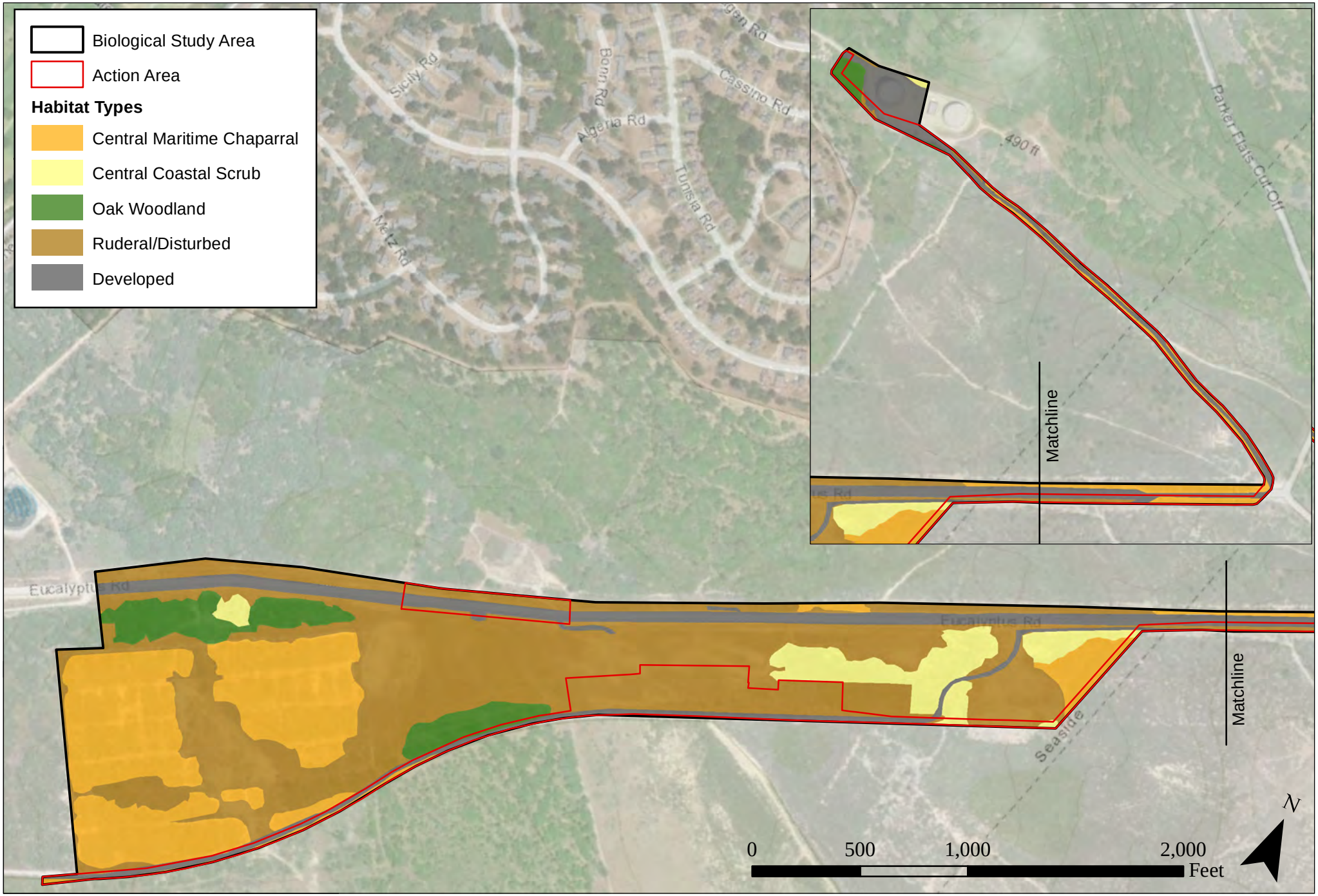
No surface waterbodies are present within or immediately adjacent to the BSA.

Vegetation

Field surveys conducted by DD&A in 2019 resulted in the mapping and quantification of four habitat types within the BSA (**Figure 7**). In addition, a portion of the BSA is developed. **Table 3-2, Habitat Types Identified within the BSA and Action Area** provides the acreages of these habitats for the BSA and Action Area. These habitat types are consistent with those documented previously in the 2016 BA for the Original PWM/GWR Project. Please refer to the 2016 BA for the Original PWM/GWR Project for detailed descriptions of each habitat type.

Table 3-2 Habitat Types Identified within the BSA and Action Area

Habitat Type	Area (Acres)	
	BSA	**Action Area**
Central Maritime Chaparral	24.8	2.2
Coast Live Oak Woodland	5.9	0.4
Central Coastal Scrub	5.8	0.2
Ruderal/Disturbed	46.3	6.9
Developed	13.3	5.1
Total	**96.1**	**14.8**



Habitat Types Map

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
7

Chapter 4. Results: Biological Resources, Discussion of Impacts, Avoidance and Minimization Efforts

4.1 Federally-Listed/Proposed Plant Species

Of the federally listed species in **Table 2-1**, one plant species is known to occur within the Action Area and/or to be affected by the Proposed Action: Monterey spineflower. In addition, two plant species are known to occur immediately adjacent to the Action Area and could be affected by the Proposed Action: Monterey gilia and Monterey spineflower. The rationale for determination of presence or absence within and adjacent to the Action Area is based on protocol-level survey results. All other federally listed or proposed plant species were determined to not be present, as presented in **Table 2-1** and therefore will not be affected by the Proposed Action.

Discussion of Monterey Spineflower

Monterey spineflower, a small, prostrate annual in the buckwheat family (Polygonaceae), was listed as threatened on February 4, 1994 (Service, 1994). Monterey spineflower was analyzed in the 2016 BA and the BO for the Original PWM/GWR Project; please refer to these documents for a full discussion of this species.

Survey Results

The CNDDB reports 18 occurrences of Monterey spineflower in the eight quadrangles reviewed. DD&A documented 170 polygons (three medium and 167 low cover class) of Monterey spineflower, totaling approximately 0.9 acre and 227 points (441 individuals) within the BSA[8] during surveys in 2019 and 2022 (**Appendix B**). Approximately 87 polygons of Monterey spineflower (low cover class, totaling 0.2 ac) and 133 points (243 individuals) are located within the Action Area. This species was documented within the central maritime chaparral, central coastal scrub, coast live oak woodland, and ruderal/disturbed habitats. In addition, Monterey spineflower was documented in areas immediately adjacent to the Action Area (**Appendix B**).

Critical Habitat

Critical Habitat for Monterey spineflower was designated in May 2002 by the Service (2002) and revised in 2006 and 2007, then finalized in 2008 (Service, 2008). Critical habitat for Monterey spineflower has been designated immediately adjacent to the Action Area within the Fort Ord National Monument; however, there is no critical habitat designated within the BSA.

[8] As identified in Section 2.4 above, surveys were conducted only in portions of the BSA; however, surveys conducted in 2022 included the entire Action Area and immediately adjacent areas and surveys in 2019 partially overlapped with the Action Area. The data presented in this section and in **Appendix B** represent a combination of the data collected in both years.

Avoidance and Minimization Efforts

As identified above in **Section 1.6, Fort Ord Habitat Management Plan**, the BSA and Action Area are located within designated "development" parcels on the former Fort Ord, within the jurisdiction of the City of Seaside and County of Monterey. The HMP anticipates some losses to Monterey spineflower as a result of redevelopment; however, with the designated reserves and corridors and habitat management requirements in place, the losses of individuals are not expected to jeopardize the long-term viability of this species or its populations on former Fort Ord.

The City of Seaside and County of Monterey, as well as all other land recipients, are required to implement HMP requirements in accordance with the deed covenants. Starting in 1997, the local jurisdictions coordinated with the Service over a period of over 20 years to prepare the Fort Ord HCP to comply with these requirements. The BA for the Original PWM/GWR Project and the subsequently issued BO were prepared under the assumption that the HCP would be approved. Therefore, the Proposed Action for the Original PWM/GWR was required to identify sensitive biological resources that may be salvaged for use in restoration activities in habitat reserve areas, in compliance with the HMP and 2017 Programmatic BO. Mitigation for individual populations of these species was not a required component of the HMP or BO.

However, in June 2020, the local jurisdictions decided not to approve the Fort Ord HCP and not collectively pursue base-wide incidental take permits and the Service has requested that the local jurisdictions initiate the steps necessary to comply with the HMP. The County of Monterey is currently preparing their RMP and anticipates approval by the Service at the end of 2022; the status of the required RMP and Borderland Management Plan for the City of Seaside is unknown. Currently, the City of Seaside and the County of Monterey are not in compliance with the HMP and 2017 Programmatic BO. As such, the project applicant recognizes that additional mitigation may be required for the Proposed Action. Implementation of the following measures are recommended to reduce or avoid impacts of project actions to Monterey spineflower within the Action Area.

As the Proposed Action will receive Federal funding, the action agency must consult with the Service under Section 7 of the ESA. As the Monterey spineflower is a plant species and any potential effects on this species will occur on non-federal lands, no take authorization is needed for the proposed action. However, the project proponents will reduce effects on the Monterey spineflower through the implementation of the following mitigation measures:

1. A qualified biologist must conduct an Employee Education Program for the construction crew prior to any construction activities. A qualified biologist must meet with the construction crew at the onset of construction at the site to educate the construction crew on the following: 1) the appropriate access route(s) in and

out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which would ensure the safety of the monitor during such activities, 3) the federally-listed species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the Service; and 6) the proper procedures if a federally listed species is encountered within the site.

2. Areas containing federally listed plant species that will not be impacted by the project will be protected prior to and during construction through the use of exclusionary fencing and/or flagging. A qualified biologist will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

3. Any landscaping or replanting required for the project shall not use species listed as noxious by the California Department of Food and Agriculture (CDFA).

4. Bare and disturbed soil shall be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the Action Area.

5. Construction equipment shall be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.

6. All non-native, invasive plant species shall be removed from disturbed areas prior to replanting.

Project Effects

The Proposed Action would result in the construction of a variety of permanent features required for the operation of the Proposed Action, including, but not limited to, pipelines, injection well facilities, and access roads. Some components would be located underground (e.g., pipelines) and, therefore, construction activities may affect Monterey spineflower through temporary, short-term disturbance of populations. Once construction of components located underground is complete, long-term effects on the species are not expected. Daily operation of the pipelines and other underground Proposed Action components are not expected to affect Monterey spineflower. For the above-ground Proposed Action components, construction activities could potentially permanently affect Monterey spineflower. **Table 4-1** provides the quantification of construction-related impacts to Monterey spineflower within the

Action Area. This quantification includes the area and number of individuals of Monterey spineflower observed within the Action Area in 2019 and 2022[9].

Table 4-1 Estimated Monterey Spineflower Impacts within the Action Area

Impact		Action Area
Temporary	Area (acres)	0.13
	Individuals	189
Permanent	Area (acres)	0.07
	Individuals	54
Total	Area (acres)	0.2
	Individuals	243

In addition, Monterey spineflower is located immediately adjacent to the Action Area (**Appendix B**). However, implementation of Avoidance and Minimization Measures 1-6 will avoid potential construction-related impacts to Monterey spineflower by preventing work from extending outside of the Action Area.

Modifications to the Project to Mitigate Effects

As the City of Seaside and County of Monterey are not in compliance with the HMP and 2017 Programmatic BO, the project proponents will modify the project design to the extent feasible while taking into consideration other site and engineering constraints to avoid impacts to Monterey spineflower. If avoidance is not feasible, construction activities may still impact this species.

7. To mitigate these impacts, the project proponents will consult with the Service and the underlying land use jurisdictions responsible for habitat management in the Monterey County Munitions Response Area (MRA) under the Environmental Services Cooperative Agreement to develop a plan to collect seed or soil containing seedbank (dependent upon the construction schedule) from Monterey spineflower plants that will be impacted during construction for redistribution within the temporary construction easement. The project proponent will finalize the location of this seed collection and redistribution obligation in consultation with the USFWS. The project proponents will create and maintain suitable habitat using a 1:1 ratio and will monitor the area for a three-year period to ensure success of the restoration effort. A Rare Plant Restoration Plan, approved by M1W prior to commencing construction on the

[9] As identified in Section 2.4 above, the data presented in this section and in **Appendix B** represent a combination of the data collected in both 2019 and 2022.

component site upon which Monterey spineflower would be impacted, shall be prepared and implemented by a qualified biologist. The plan shall include, but is not limited to, the following:

a. A detailed description of on-site and/or off-site mitigation areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, including, if appropriate, increased planting ratio to ensure the applicable success ratio. Although off-site mitigation areas may be available, the City's ordinance related to Military Munition and deed restrictions prohibit exportation of soil from the site; therefore, offsite areas for mitigation may not be feasible.

b. A description of a 3-year monitoring program, including specific methods of vegetation monitoring, data collection and analysis, restoration goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

Cumulative Effects

The geographic scope for cumulative impact analysis on terrestrial resources consists of the overall region (such as central coastal California) in which the Proposed Action facilities are being constructed. The PWM/GWR Project Final EIR included an extensive list of past, present, and reasonably foreseeable future projects. That list included 35 projects of varying type and scale within the geographical proximity of the various components of the approved PWM/GWR Project. The cumulative project list from the PWM/GWR Project Final EIR was included as Appendix D in the 2016 BA.

The SEIR for the Exp. PWM/GWR Project relies on this cumulative project list. Although some of the cumulative projects have since been abandoned or may be beyond the scope of the Proposed Action's potential effects, there are no relevant changes to the cumulative project list that would result in an impact that would combine with the Proposed Action. As a result, the existing cumulative list is a reasonable forecast of potential cumulative projects even when considering that construction schedules of the projects listed have shifted. Based on the list of cumulative projects provided in Appendix D in the 2016 BA, projects throughout the region could have adverse effects on the same sensitive species and habitats that occur within and adjacent to the Proposed Action component sites. However, the Proposed Action's construction-related impacts would not be cumulatively considerable with implementation of the avoidance and minimization measures identified. Similarly, the Proposed Action's operational impacts would not be cumulatively considerable with implementation of the avoidance and minimization measures identified.

Discussion of Monterey Gilia

Monterey gilia, a short, sticky-haired annual herb in the phlox family (*Polemoniaceae*), was listed as endangered on June 22, 1992 (Service, 1992). Monterey gilia was analyzed in the 2016 BA and the BO for the Original PWM/GWR Project; please refer to these documents for a full discussion of this species.

Survey Results

The CNDDB reports 26 occurrences of this species in the eight quadrangles reviewed. DD&A documented 17 polygons of Monterey gilia, totaling approximately 0.02 acre and 17 points (40 individuals) within the BSA during surveys in 2019 and 2022. None of the Monterey gilia observed are located within the Action Area; however, some individuals are located near the Action Area (as shown on **Appendix B-1 page 7**). This species was documented within the central maritime chaparral, central coastal scrub, and ruderal/disturbed habitats.

Critical Habitat

Critical habitat has not been designated or proposed for Monterey gilia.

Avoidance and Minimization Efforts

Avoidance and Minimization Measures 1-6 (identified above for Monterey spineflower) are recommended to avoid impacts of project actions to Monterey gilia located near the Action Area by preventing work from extending outside of the Action Area.

Project Effects

The project has been designed to avoid direct impacts to Monterey gilia where it was observed during surveys conducted in 2019 and 2022. Additionally, implementation of Avoidance and Minimization Measures 1-6 will avoid potential construction-related impacts to Monterey gilia outside of the Action Area, in a location where Monterey gilia has been identified. Therefore, the project may affect but would not adversely affect Monterey gilia.

Modifications to the Project to Mitigate Effects

As identified above, the project avoids impacts to Monterey gilia. Therefore, no modifications to the project to mitigate effects to Monterey gilia are necessary as impacts to this species will be avoided.

Cumulative Effects

As discussed above under Cumulative Effects for Monterey Spineflower, the cumulative project list from the PWM/GWR Project Final EIR was included as Appendix D in the 2016 BA. The SEIR for the Exp. PWM/GWR Project relies on this cumulative project list.

Based on this list of cumulative projects, projects throughout the region could have adverse effects on the same sensitive species and habitats that occur within and adjacent to the Proposed

Action component sites. However, because the Proposed Action will avoid all impacts to Monterey gilia, no cumulative effects of construction or operation will occur.

4.2 Federally-Listed or Proposed Animal Species Occurrences

As identified in **Table 2-2**, no federally listed wildlife species are known or have the potential to occur within the BSA and/or to be affected by the Proposed Action. The rationale for determination of presence or absence within the BSA is based on local occurrence data and the habitat features documented to occur within the BSA. However, avian species protected under the MBTA are known or have the potential to occur within the BSA and Action Area, have the potential be affected by the Proposed Action, and are discussed below.

Discussion of Migratory Bird Species

The MBTA of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. The Service is responsible for overseeing compliance with the MBTA and implements Conventions (treaties) between the United States and four countries for the protection of migratory birds – Canada, Mexico, Japan, and Russia. The Service maintains a list of migratory bird species that are protected under the MBTA, which was updated in 2020 to: 1) add new species that qualify for protection under the MBTA, are newly recognized as a result of taxonomic changes, or have new distributional records documenting their natural occurrence in the United States; 2) correct the spelling of species names on the alphabetized and taxonomic lists; and 3) update name changes based on new taxonomy or to conform to accepted common names (Service, 2020).

On January 7, 2021, the Service published a final rule defining the scope of the MBTA as it applies to conduct resulting in the injury or death of migratory birds protected by the MBTA (Service, 2021b). This rule argued that the MBTA does not extend coverage to actions that incidentally take or kill migratory birds. On October 4, 2021, the Service published a final rule revoking that rule to return to implementing the MBTA as prohibiting incidental take and applying enforcement discretions, consistent with judicial precedent and longstanding agency practice prior to 2017 (Service, 2021c).

Survey Results

Various migratory bird species have a potential to nest within any of the large trees present within and adjacent to the BSA, which includes several individuals or small clusters of cypress and coast live oak trees. Migratory birds were analyzed in the 2016 BA and the BO for the Original PWM/GWR Project; please refer to these documents for a full discussion of this species.

Migratory bird species that may be present within the Action Area include, but are not limited to, common poorwill (*Phalaenoptilus nuttallii*), western meadowlark (*Sturnella neglecta*), Townsend's warbler (*Setophaga townsendii*), white-crowned sparrow (*Zonotrichia aleucophrys*), California thrasher (*Toxostoma redvivum*), ash-throated fly catcher (*Myiarchus cinerascens*), tree swallow (*Tachycineta bicolor*), and California horned lark (*Eremophila alpestris actia*).

Critical Habitat

No critical habitat is designated for migratory birds.

Avoidance and Minimization Efforts

The 2016 BO identified Avoidance and Minimization measures to avoid adverse impacts to migratory birds. These measures are consistent with the avoidance and minimization measures adopted by the M1W Board on April 26, 2021, through the approval the Final SEIR for the Proposed Action. All applicable measures identified in the 2016 BO would be implemented for the Proposed Action to avoid adverse impacts to migratory birds.

Project Effects

If construction occurs during the nesting season (generally February 15 to September 1), there is the potential to adversely affect migratory bird species. Construction activities such as vegetation removal or site grading during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment within the Action Area and immediately adjacent areas of the Action Area. Implementation of the measures identified above will avoid or reduce these potential effects.

Modifications to the Project to Mitigate Effects

No modifications to the project to mitigate effects to migratory birds are necessary as negative effects will be avoided.

Cumulative Effects

Threats to migratory bird species include loss of nesting and foraging habitat and disturbance of nests by recreational activities, stream channelization, development, logging, grazing, and water diversion throughout the west. As the project will avoid and minimize effects to individuals, no cumulative effects to migratory bird species are anticipated. The project will temporarily affect habitat for migratory birds.

Chapter 5. Conclusions and Determination

5.1 Conclusions

The official Service species list for the project was received on October 13, 2021. One federally threatened species is known within the Action Area: Monterey Spineflower. In addition, Monterey gilia and Monterey spineflower are known to occur immediately adjacent to the Action Area. Impacts associated with construction and permanent project features may include loss of individuals or habitat for Monterey spineflower. The project has been designed to avoid impacts to known locations of Monterey gilia. However, impacts to Monterey gilia and Monterey spineflower individuals or habitat may occur if work is conducted outside of the project limits.

Several migratory bird species protected by the MBTA also have the potential to nest and forage within the Action Area. Temporary disturbance may occur to foraging migratory birds during construction activities. Additionally, if construction occurs during the nesting season, activities such as vegetation removal or site grading could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment within Action Area and immediately adjacent areas of the Action Area. Operation of the project is not expected to result in impacts to bird species protected by the MBTA.

There are no areas of designated critical habitat within the Action Area. Therefore, the Proposed Action will not impact Critical Habitat.

5.2 Determination

Design features of the Proposed Action and the avoidance and minimization measures included above will reduce the effects of the Proposed Action to Monterey spineflower and Monterey gilia. However, construction activities are likely to **adversely affect** Monterey spineflower and **may affect but are not likely to adversely affect** Monterey gilia.

Avoidance and minimization measures included in this document will reduce impacts to migratory birds. As such, the project **may affect, but is not likely to adversely affect** migratory birds.

There are no areas of designated critical habitat within the Action Area. As such, the project **will not affect** critical habitat.

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Appendix A – Official U.S. Fish and Wildlife Service IPaC Trust Resource Report for Consultation (Generated October 13, 2021)

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To: October 13, 2021
Consultation Code: 08EVEN00-2022-SLI-0016
Event Code: 08EVEN00-2022-E-00042
Project Name: Specific Components of the Expanded PWM/GWR Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

Project Summary

Consultation Code: 08EVEN00-2022-SLI-0016
Event Code: Some(08EVEN00-2022-E-00042)
Project Name: Specific Components of the Expanded PWM/GWR Project
Project Type: WATER SUPPLY / DELIVERY
Project Description: Expansion of the Monterey 1 Water Pure Water Monterey/Groundwater Replenishment Project - new injections wells and conveyance pipeline

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.6259389,-121.80011867589513,14z

Counties: Monterey County, California

Endangered Species Act Species

There is a total of 20 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Santa Cruz Long-toed Salamander *Ambystoma macrodactylum croceum* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7405	Endangered

Fishes

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Smith's Blue Butterfly *Euphilotes enoptes smithi* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4418	Endangered

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Clover (tidestrom"s) Lupine *Lupinus tidestromii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4459	Endangered
Contra Costa Goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Menzies' Wallflower *Erysimum menziesii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2935	Endangered
Monterey Gilia *Gilia tenuiflora ssp. arenaria* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/856	Endangered
Monterey Spineflower *Chorizanthe pungens var. pungens* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/396	Threatened
Yadon's Piperia *Piperia yadonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4205	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Monterey Spineflower *Chorizanthe pungens var. pungens* https://ecos.fws.gov/ecp/species/396#crithab	Final

Appendix B – Federally-Listed Plant Species Survey Results

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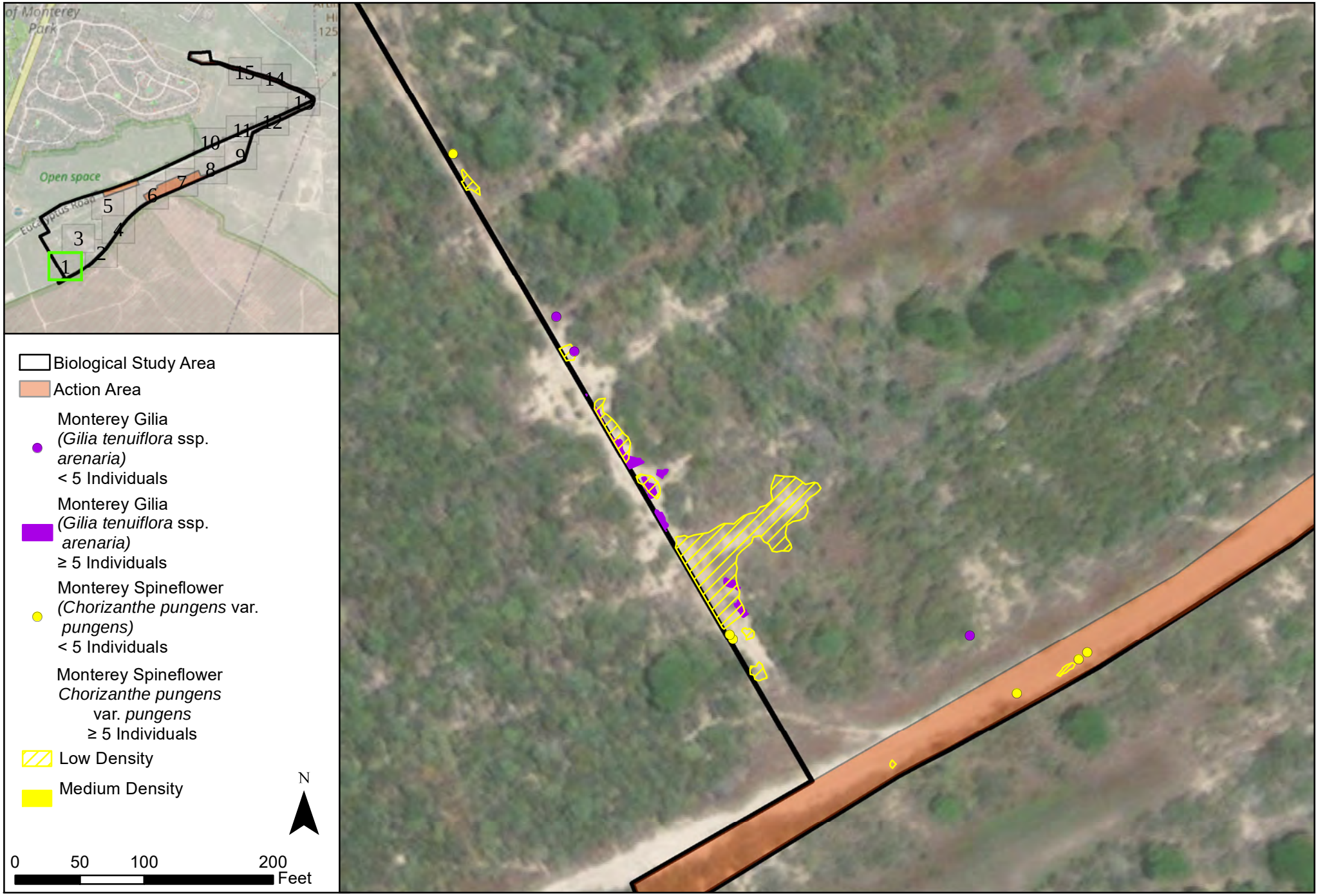

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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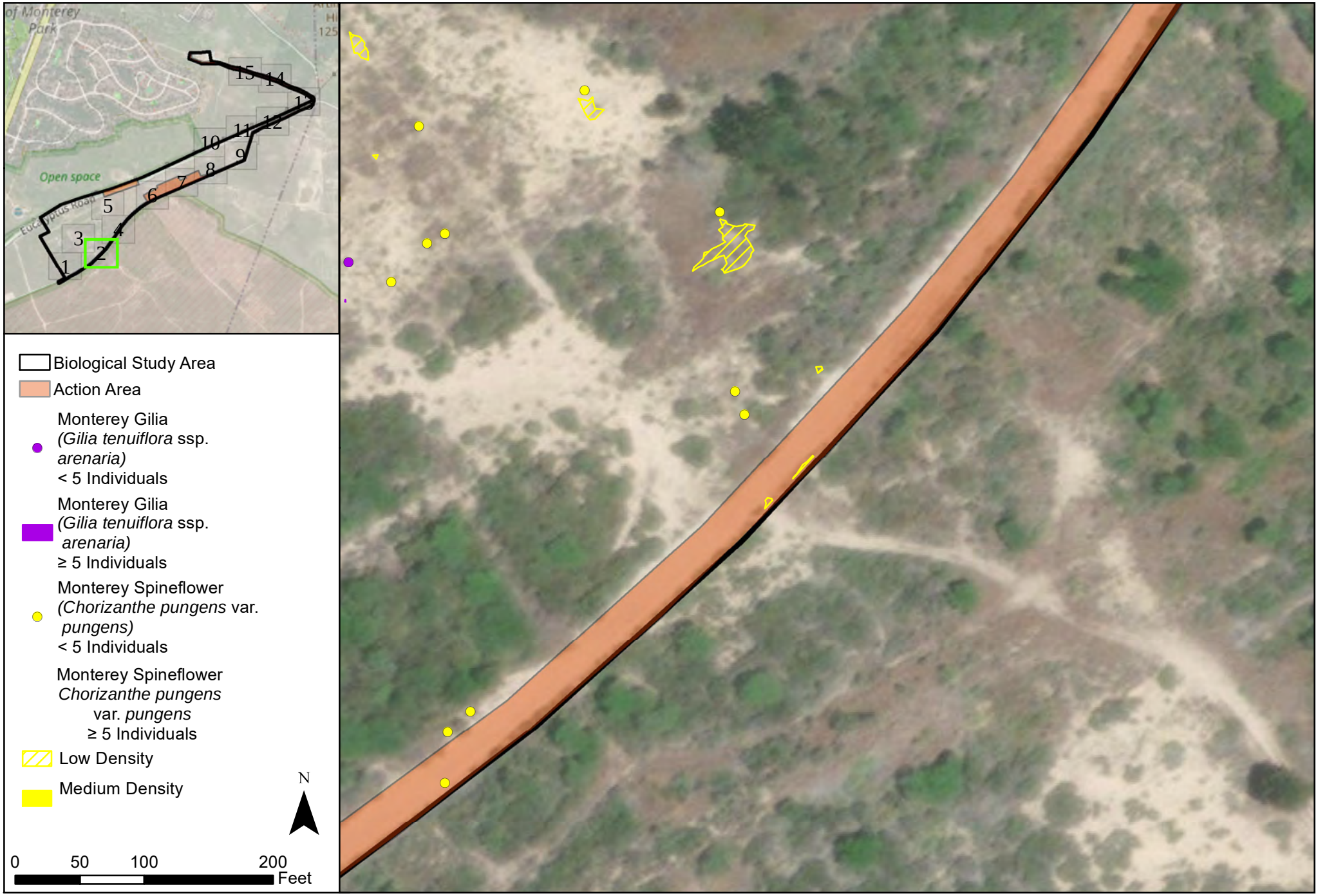

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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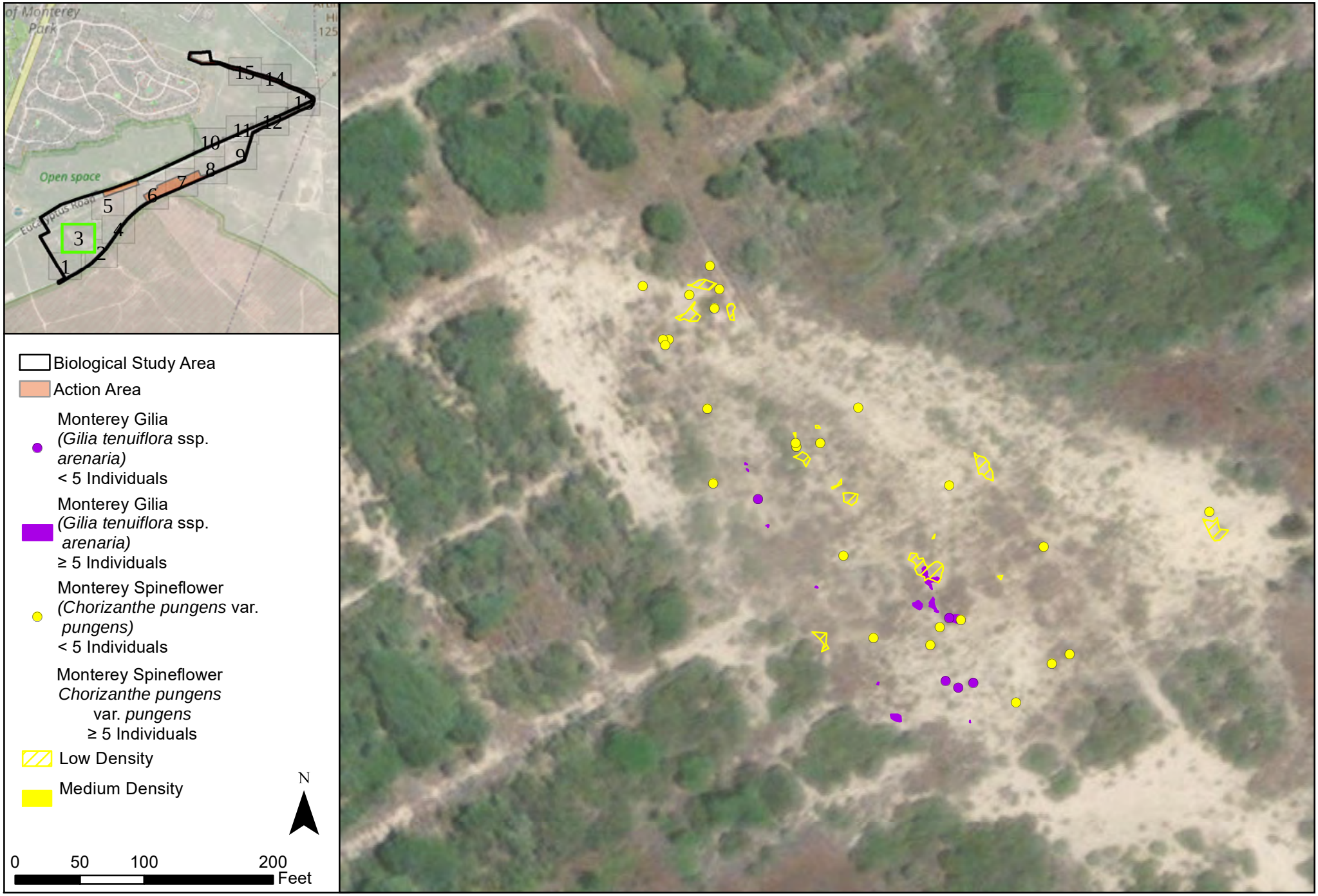

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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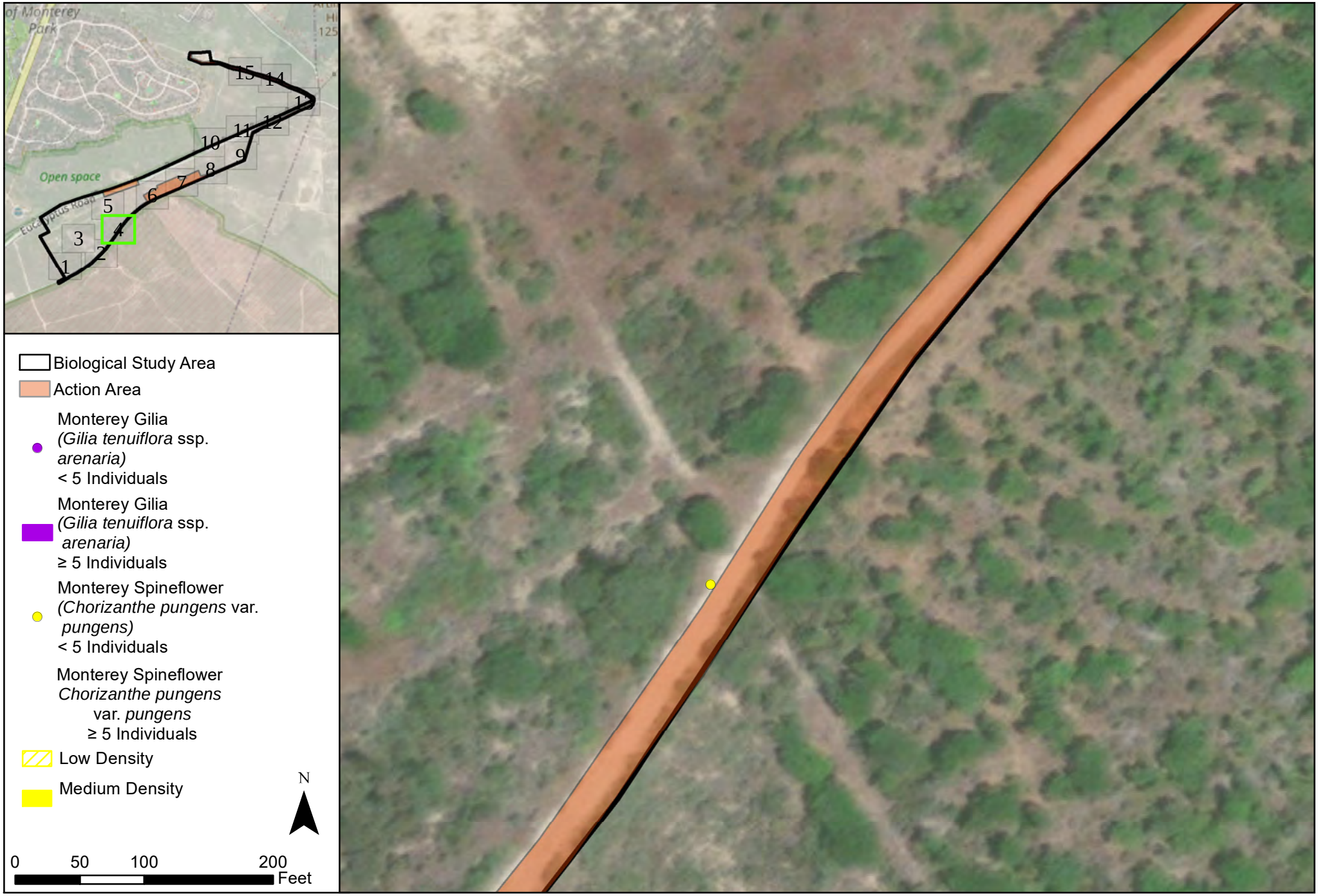

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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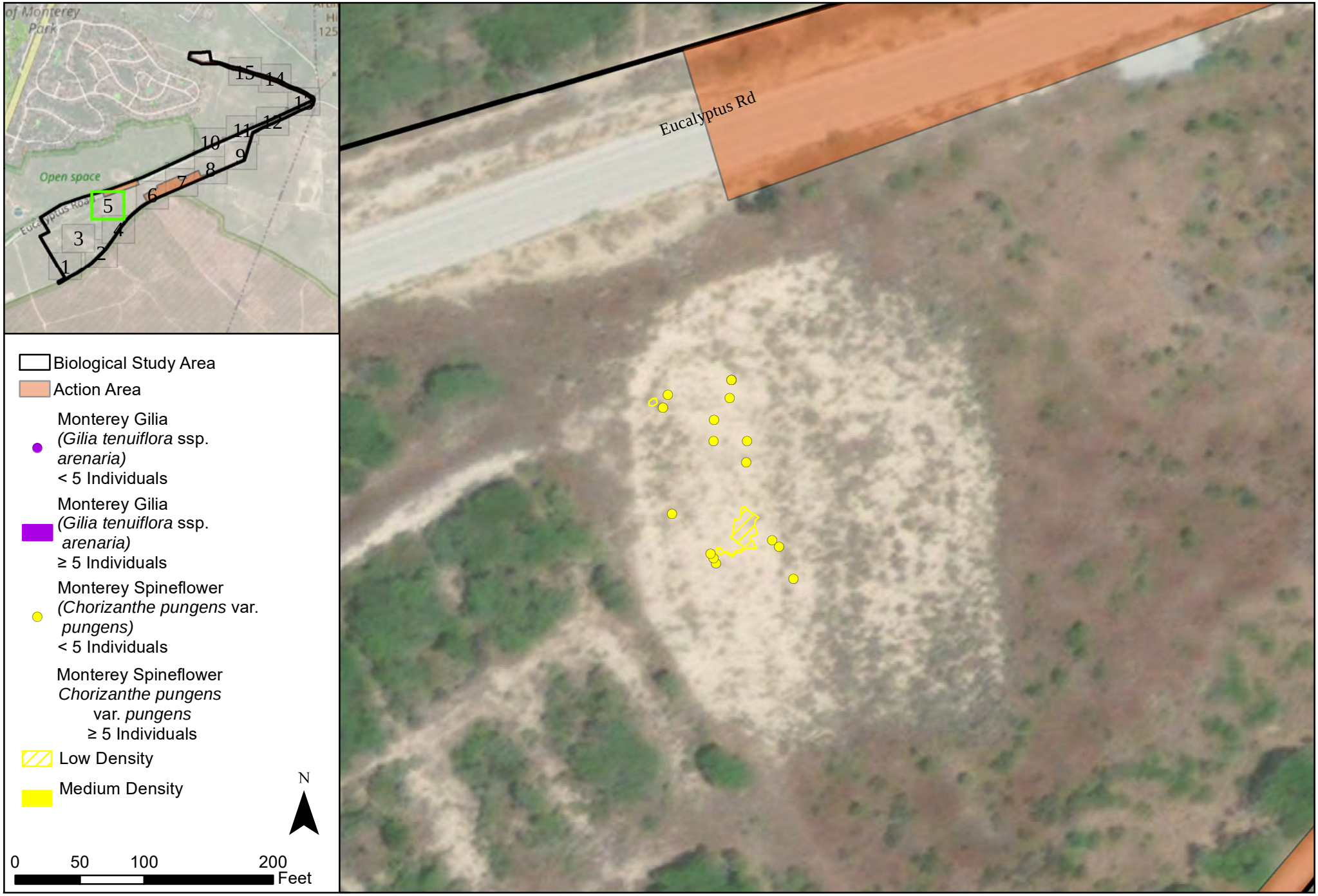

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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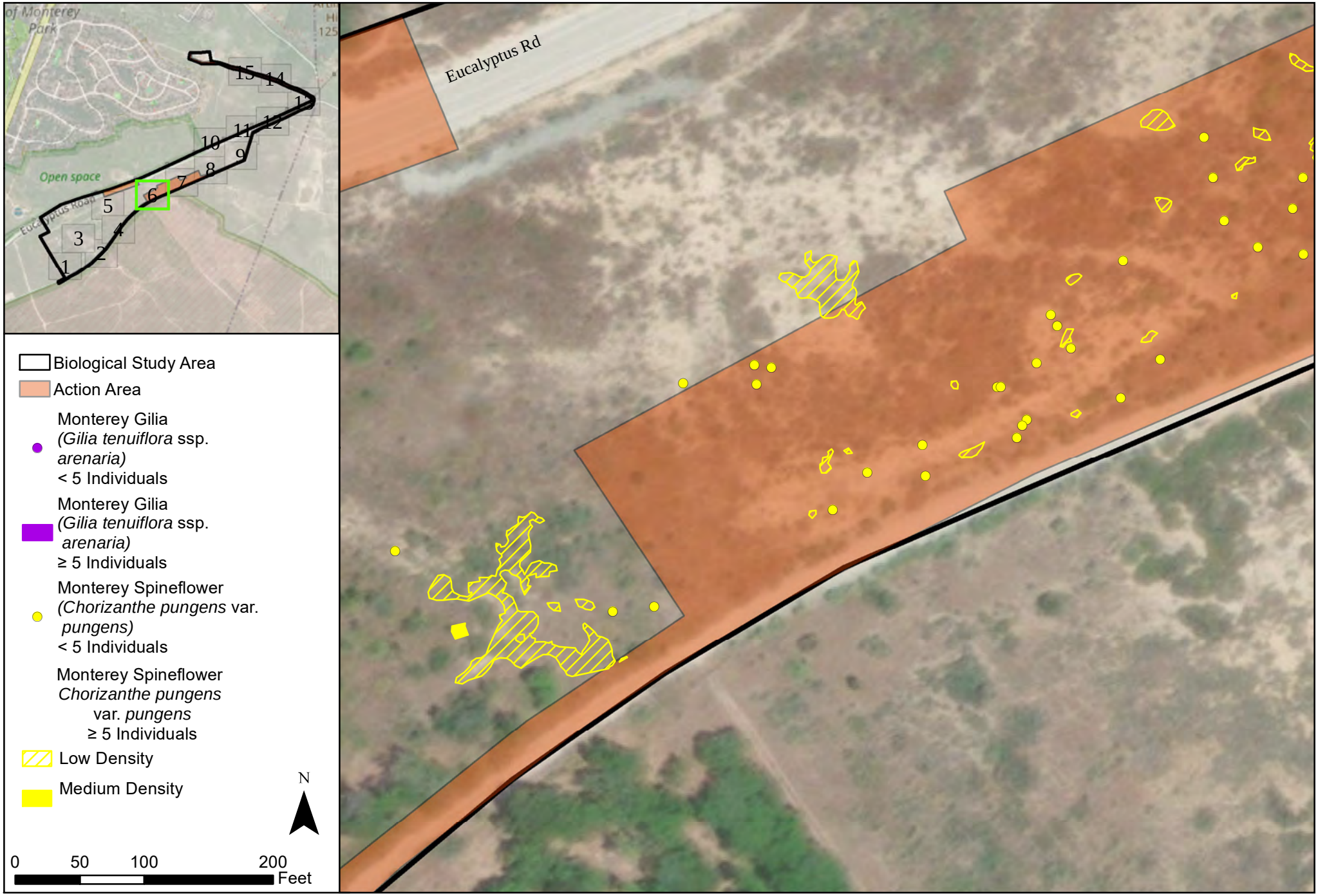

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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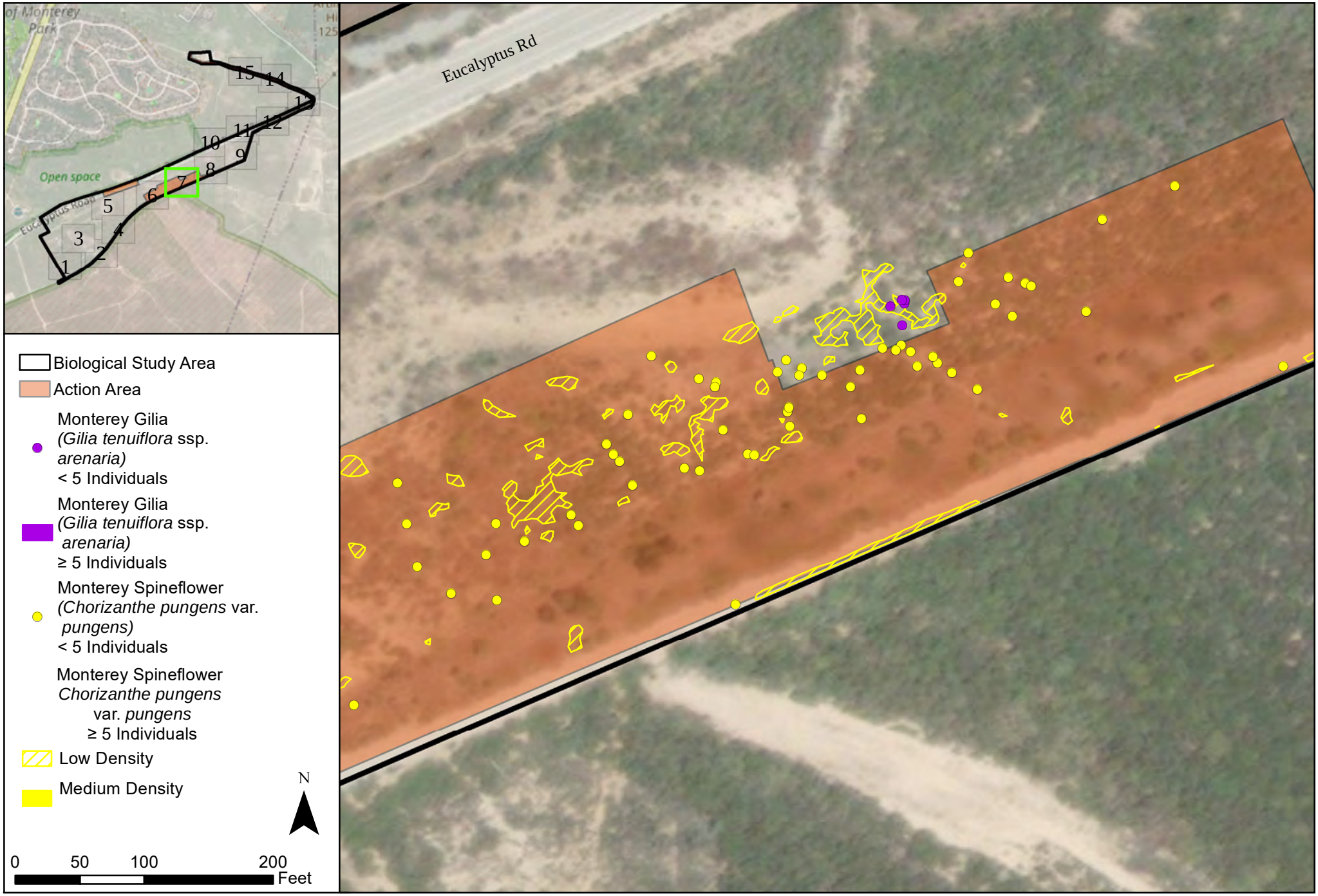

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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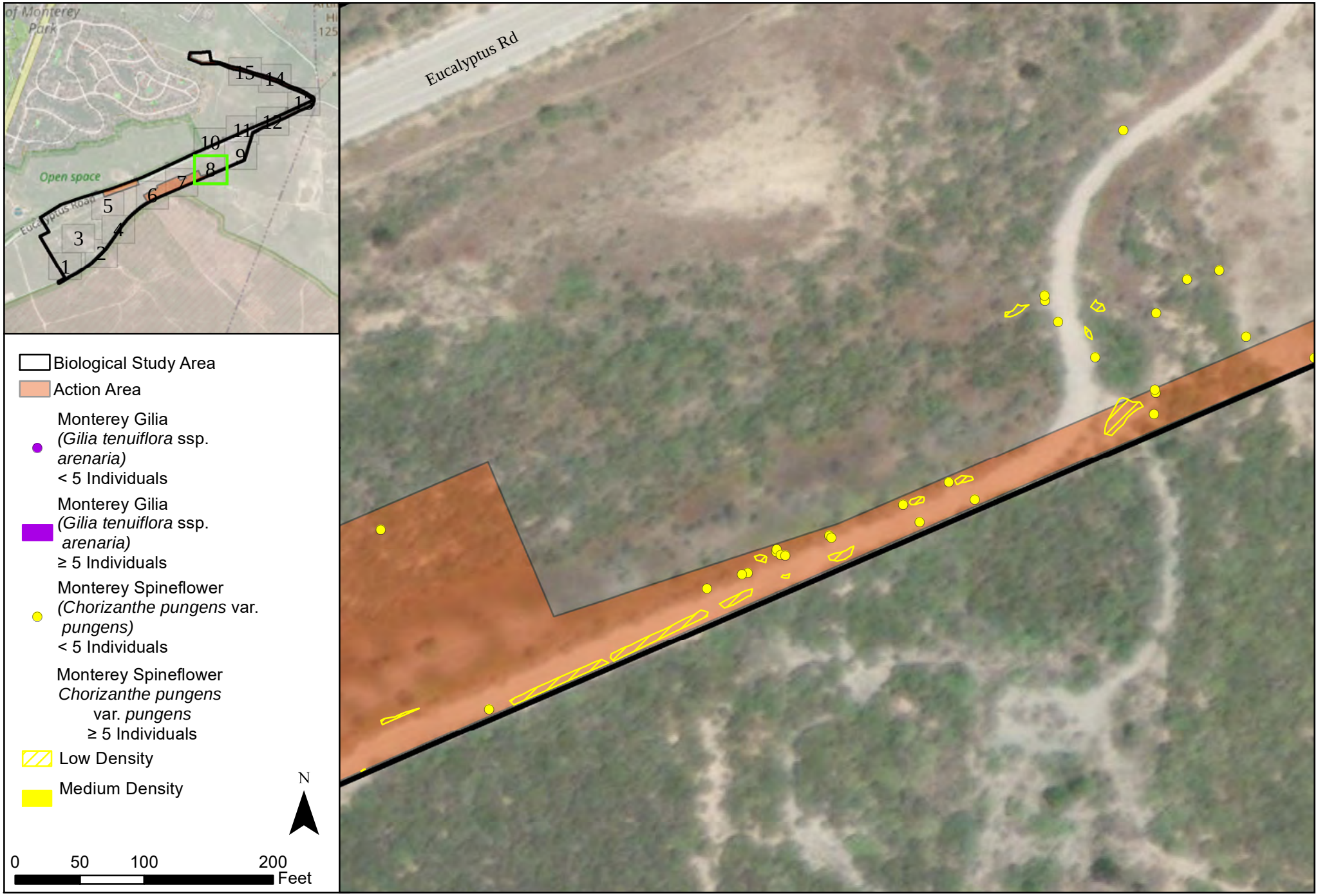

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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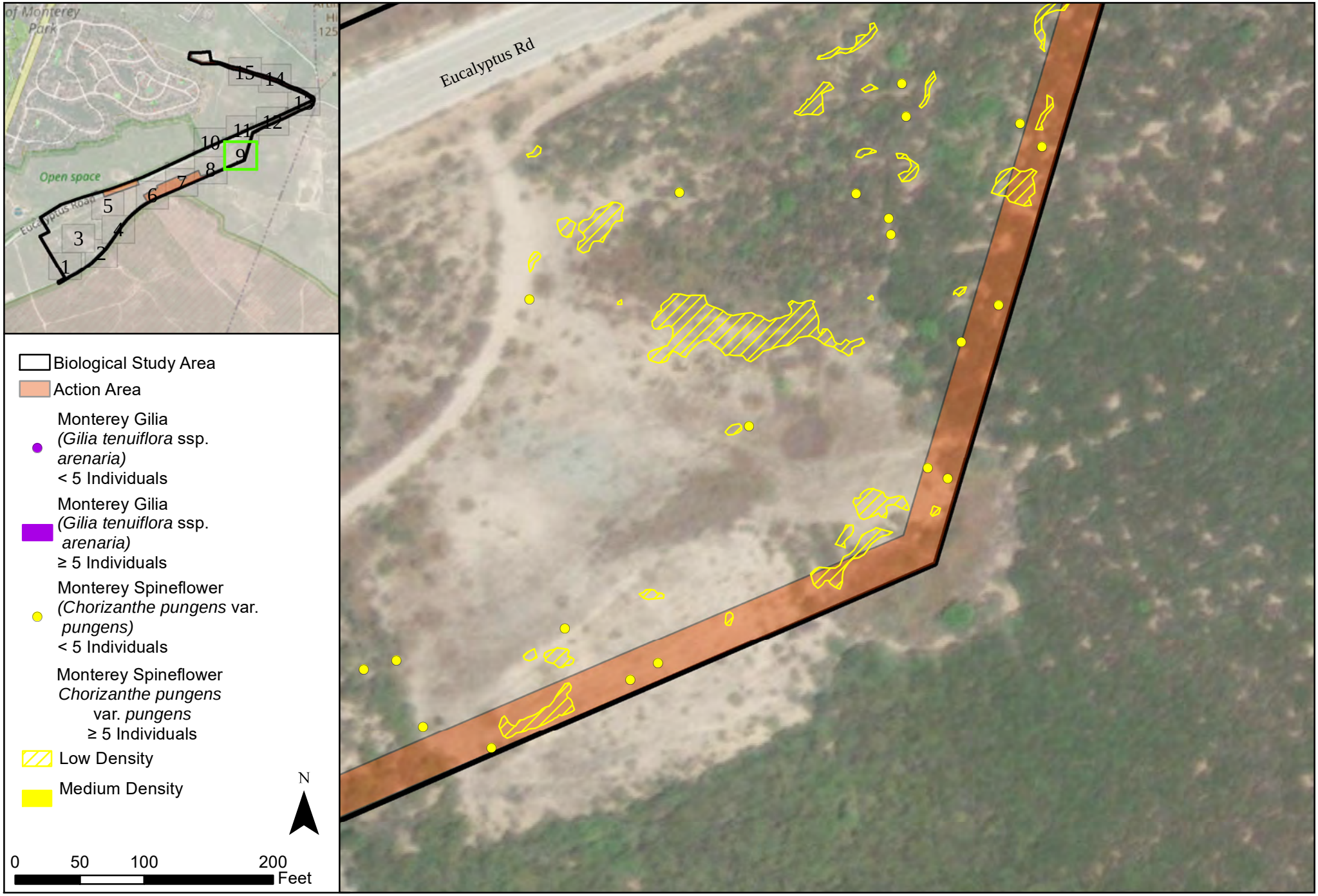

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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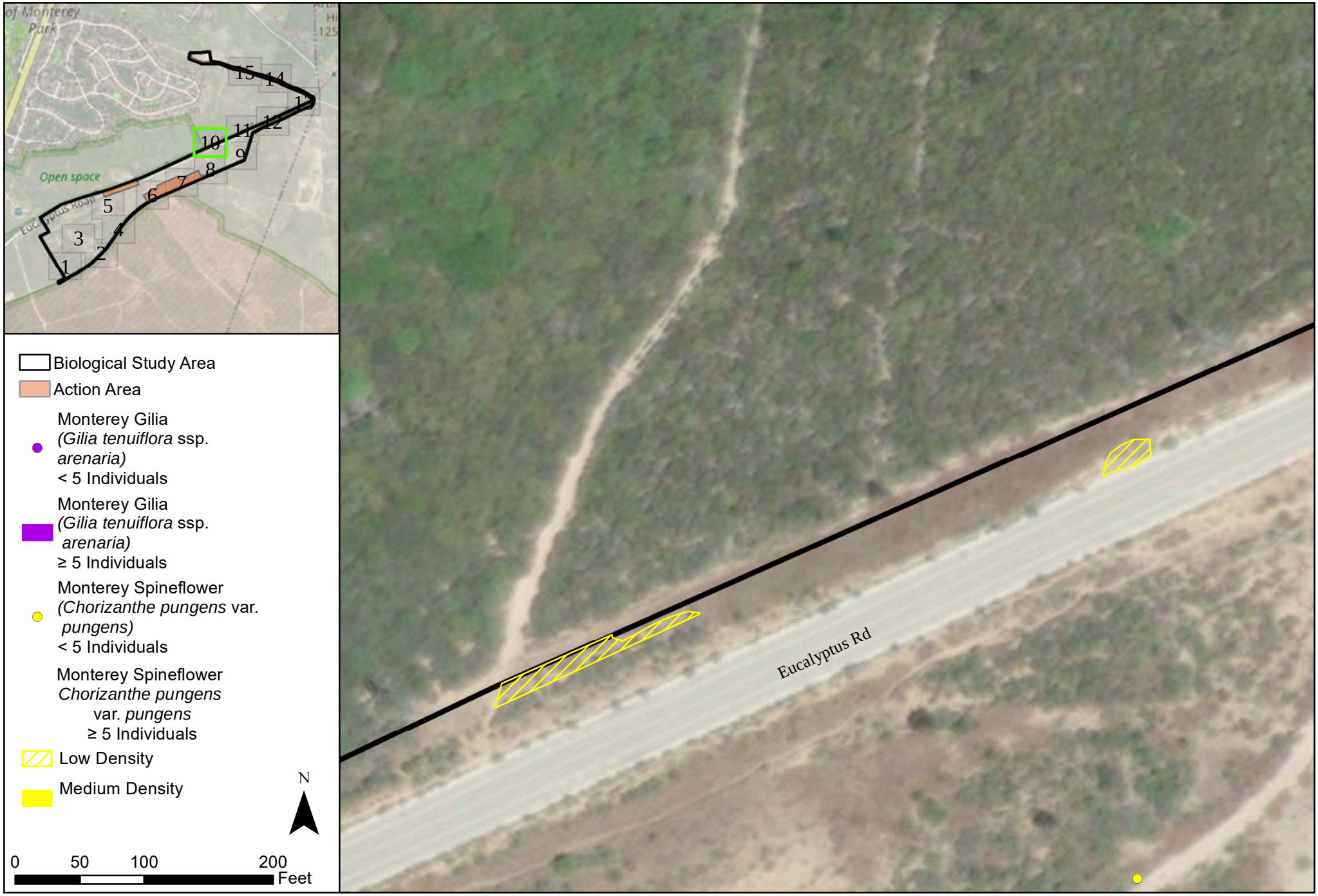

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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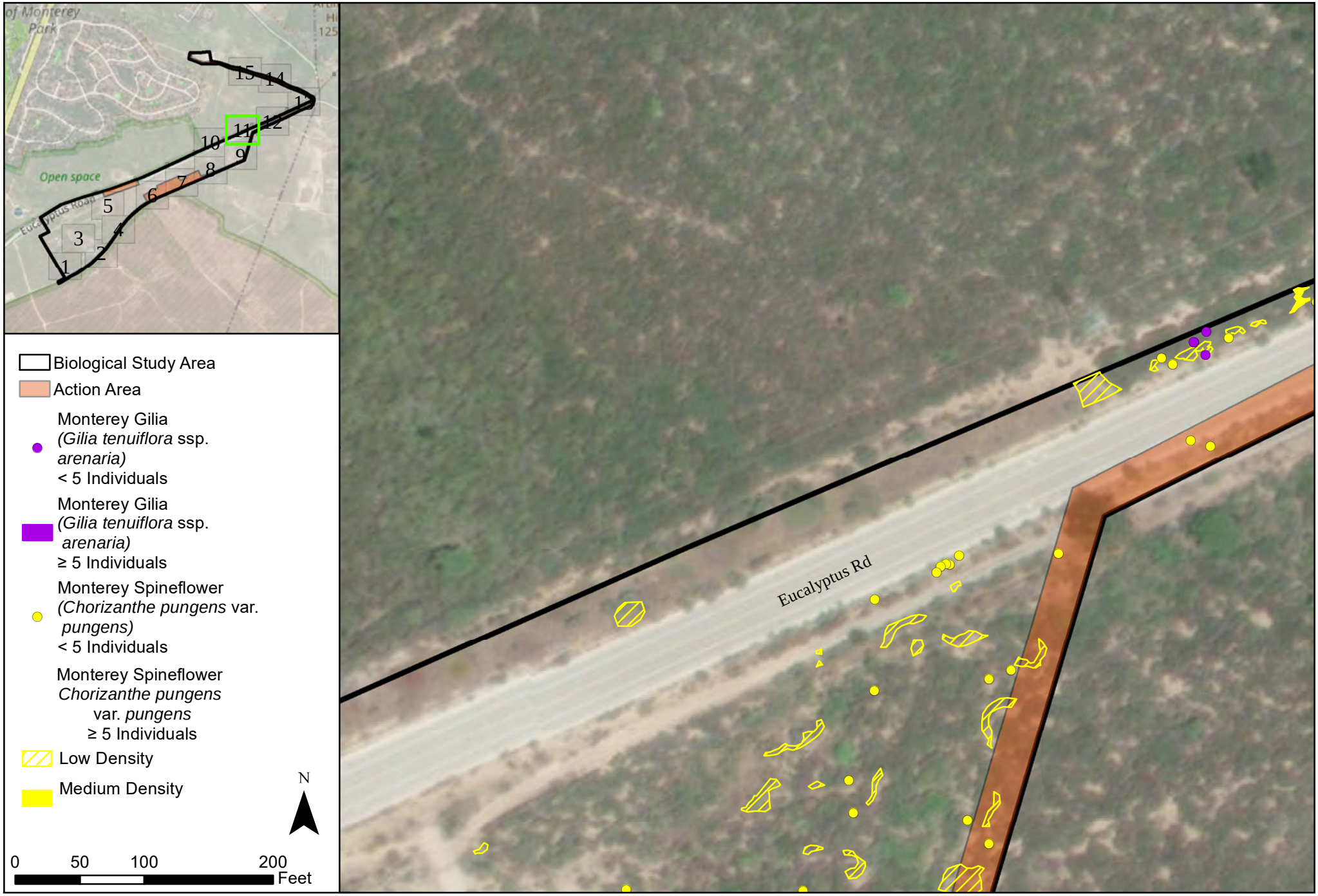

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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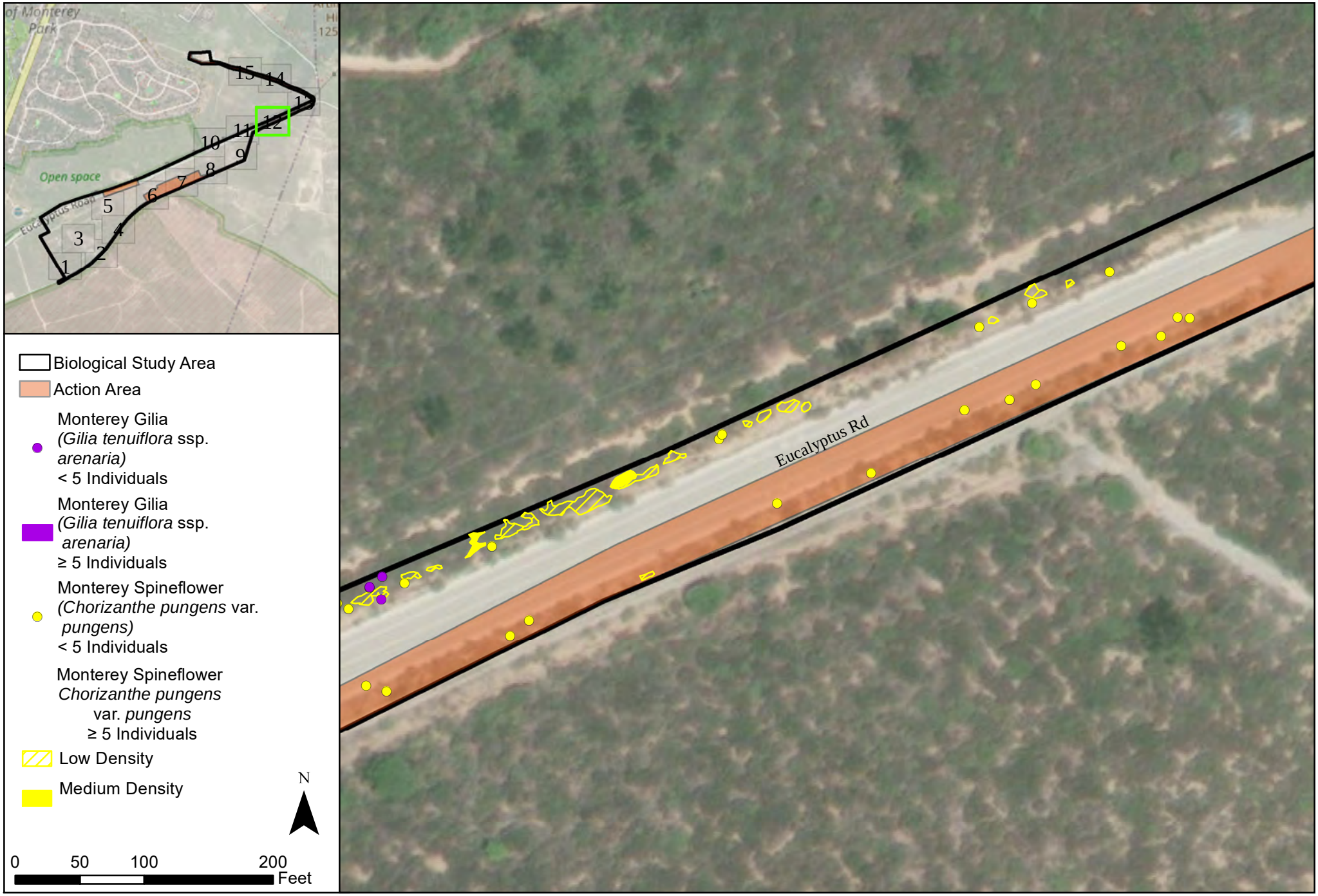

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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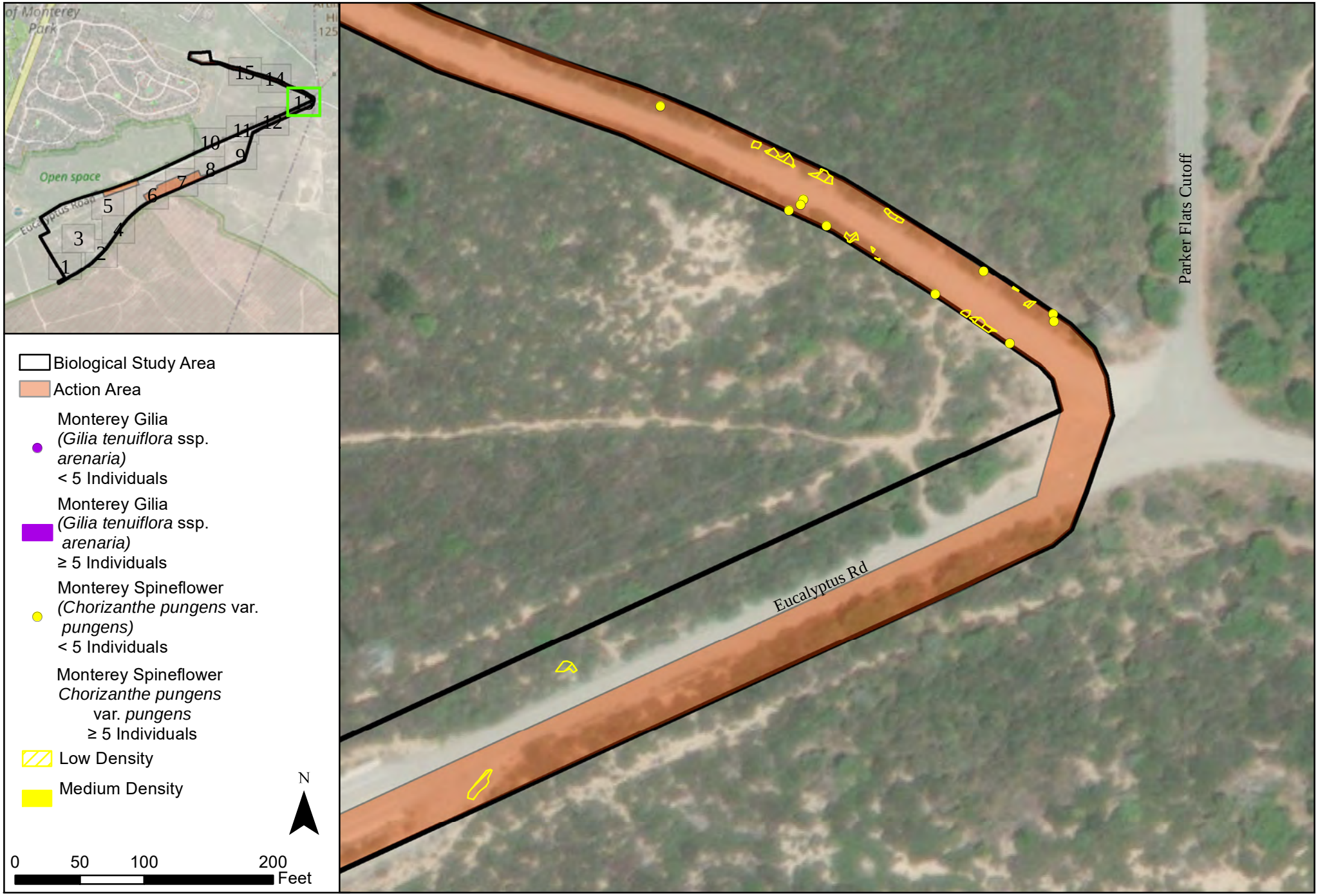

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
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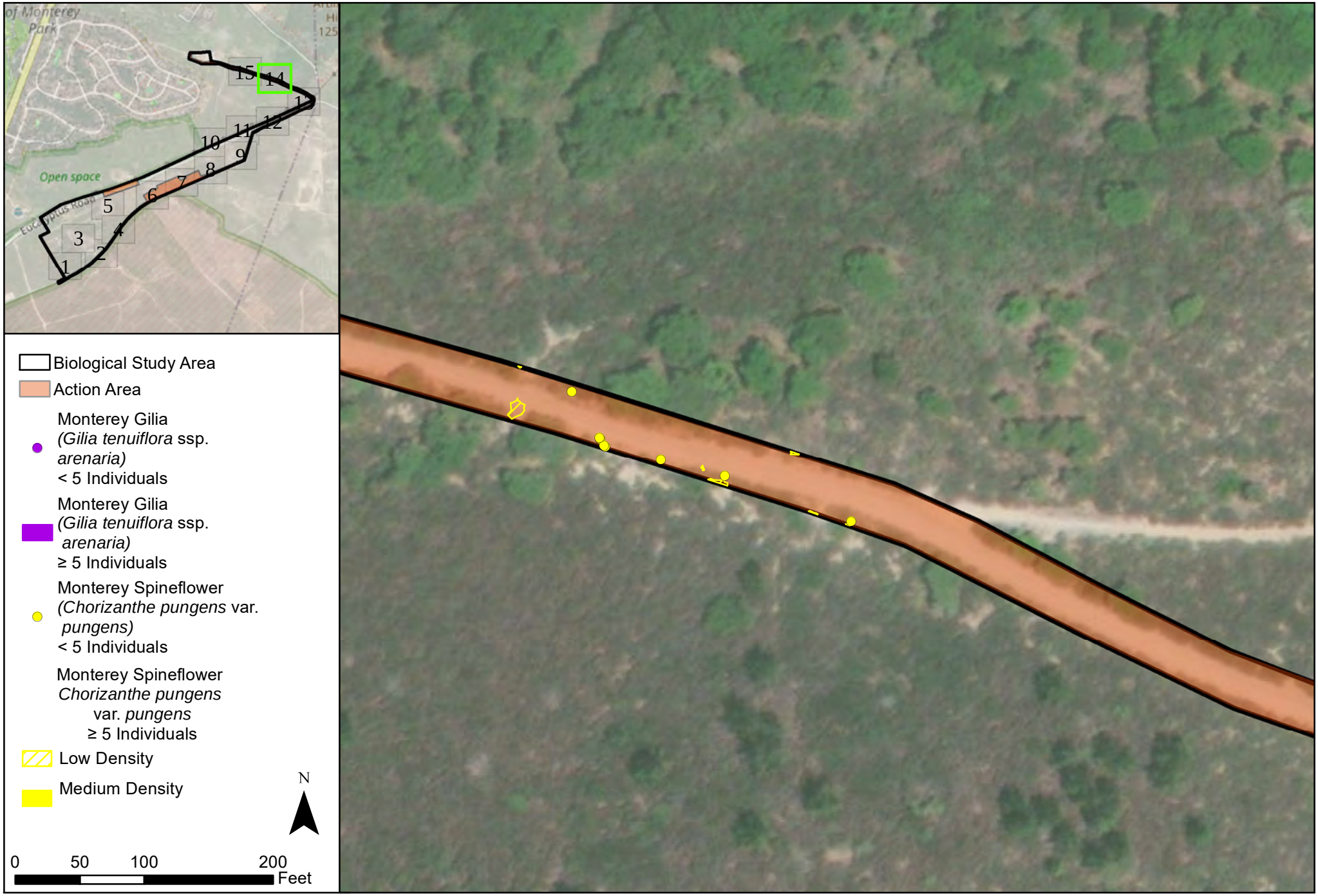

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

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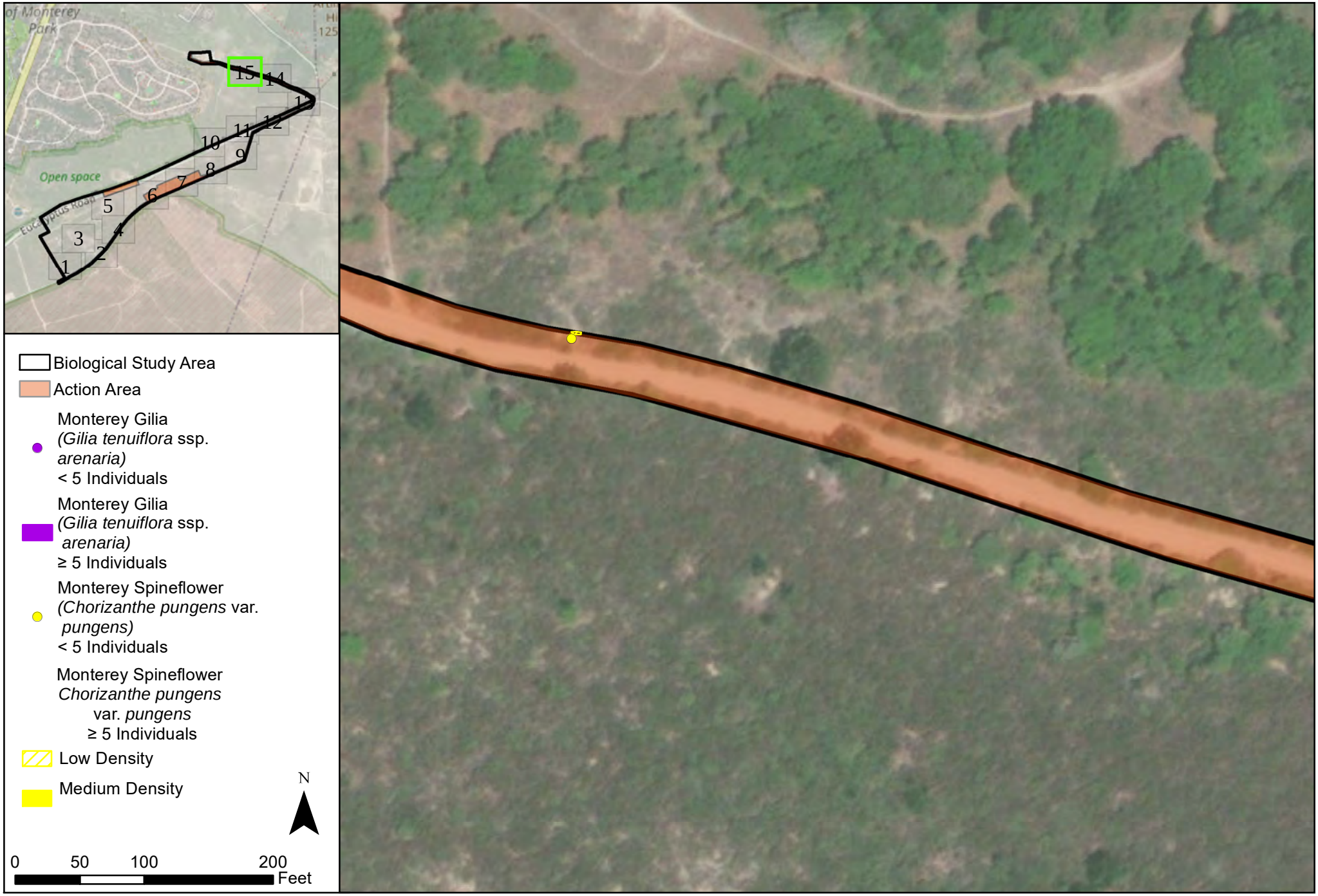

Federally-Listed Plant Species Survey Results

June 2022

Expanded PWM/GWR Project
Project Description for Federal Consultation

Appendix
B-15

Attachment E: June 2022 Letter to U.S. Fish and Wildlife Serve

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

June 15, 2022

ELECTRONIC SUBMITTAL

Leilani Takano
Assistant Field Supervisor
Chad Mitcham
Senior Biologist
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

RE: 2016-F-0523; ***Revised*** Biological Assessment for Re-Initiation of Section 7 Endangered Species Act Consultation for Monterey One Water's Expanded Pure Water Monterey (PWM) Project (Expanded PWM Project) (the Project)

Dear Ms. Takano and Mr. Mitcham:

On March 8, 2022, the U.S. Environmental Protection Agency's (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) program requested re-initiation of consultation with the U.S. Fish and Wildlife Service (the Service) on the proposed Monterey One Water (M1W or the Agency) Expanded Pure Water Monterey Groundwater Replenishment (PWM/GWR) Project (Expanded PWM Project) in Monterey County, California.

The EPA's March 8, 2022, letter summarized the prior consultation for the base PWM/GWR Project, and the resultant Biological Opinion dated December 20, 2016 (hereafter, referred to as the PWM BiOp). The letter discussed how M1W is now implementing an expansion to the PWM/GWR Project and is thus seeking a loan from the WIFIA program. the March letter also described the base PWM/GWR Project and the Proposed Action (which for the EPA is funding of the Expanded PWM Project), including the location of new components, construction activities, and the associated habitat at and in the vicinity of the new and modified project components. The letter summarized M1W's Biological Assessment for Re-initiation of Consultation, which was submitted to the Service on March 8, 2022, to document the changes to effects on special status species.

On March 21, 2022, EPA, M1W and USFWS met to discuss the PWM Project, its expansion, and the existing and new USFWS Section 7 Consultation. During the meeting, Mr. Mitcham requested updated surveys and quantification for the three potentially present species. He also requested additional information about the local jurisdiction and their obligations to comply with the Fort Ord Multispecies Habitat Management Plan and other plant species mitigation obligations of the Fort Ord Reuse Plan.

Identified Listed Species and Critical Habitats

In 2019 and, more recently in April and May 2022, M1W biologists conducted surveys for special-status species and biological resources on the Information for Planning and Conservation (IPaC) species list. Surveys identified one federally listed flowering plant species which is known to occur within and near the Action Area, the threatened Monterey spineflower (*Chorizanthe pungens var. pungens*) and one flowering plant species which is located near, but not within, the Action Area, the endangered Monterey gilia (*Gilia tenuiflora ssp. Arenaria*). Although suitable habitat may exist for Yadon's piperia (P*iperia yadonii*), no prior surveys have identified it as present within the biological survey areas on site of any Action Areas. No federally listed wildlife species nor critical habitat is known or have the potential to occur within the Action Area and/or be affected by the Project. However, several avian species protected under the Migratory Bird Treaty Act are known or have the potential to occur within the Action Area. The IPaC is included in Appendix A of Enclosure 1.

Yadon's piperia is a federally Endangered perennial herb that blooms from May through August known to occur in sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. No specimen was identified in the BSA during surveys conducted in 2019 nor in 2022. The Proposed Action will have **no effect** on Yadon's piperia.

Monterey spineflower is a federally threatened, California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1B, and Fort Ord Habitat Management Plan (HMP) species with designated critical habitat in the vicinity of the Action Area. The Monterey spineflower blooms from April to June, typically occurring on open sandy or gravelly soils on relic dunes in coastal dune, central coastal scrub, and central maritime chaparral habitats, though it can also be associated with cismontane woodlands and valley and foothill grasslands. The Survey in 2022 identified 87 polygons of containing Monterey spineflower totaling (0.2 acres) and 133 points (243 individuals) within the Action Area. Expanded PWM Project design features and avoidance and minimization measures below will reduce the effects of the Project on the Monterey spineflower, however, construction activities **may affect and are likely to adversely affect** the Monterey spineflower.

Monterey gilia is a federally Endangered, state Threatened, and CNPS CRPR 1B species that blooms from April through June typically found in sandy openings of maritime chaparral, cismontane woodland, coastal dune and central coastal scrub habitats. Survey documented 17 polygons of Monterey gilia, totaling approximately 0.02 acre and 17 points (40 individuals) within the BSA during surveys in 2022. None of the Monterey gilia observed are located within the Action Area; however, some individuals are located near the Action Area.

The Biological Assessment submitted previously to USFWS in March 2022 included a "no effect' determination for Monterey gilia because Monterey gilia had not been identified within the Action Area or within the immediate vicinity of the Action Area in prior surveys. Following the spring 2022 botanical survey, which supplemented the focused botanical survey that was completed in 2019, Monterey gilia was documented immediately adjacent to the Action Area. Given the proximity of the population the "no effect" determination was modified to "may affect, but not likely to adversely affect". A "not likely to adversely affect" determination is the appropriate conclusion when effects on listed species and/or critical habitat are expected to be discountable (extremely unlikely to occur), insignificant (so small they cannot be meaningfully measured, detected, or evaluated), or wholly beneficial (ALL effects benefit the species

and/or critical habitat). In this case, avoidance measures are necessary (i.e., exclusionary fencing) to avoid any accidental damage to the adjacent Monterey gilia occurrence. Because of the avoidance measures, the effects are extremely unlikely to occur, and therefore "not likely to adversely affect" is the appropriate determination for this project.

The Proposed Action has been redesigned to avoid the known occurrences; however, due to the adjacency of the occurrence to the Action Area, the project **may affect, but would not likely adversely affect** Monterey gilia. As identified above, the Project has been designed to avoid direct impacts to Monterey gilia where it was observed during surveys conducted in 2022. Implementation of Avoidance and Minimization Measures 1-6 will avoid potential construction-related impacts to Monterey gilia outside of the Action Area, in the location where Monterey gilia was identified.

Avoidance and Minimization Measures

As concluded in the Revised Biological Assessment (Enclosure 1), the Proposed Action would likely adversely affect one special-status species due to construction of Product Water Conveyance Pipeline and Injection Well Facilities, the Monterey spineflower. The BSA and Action Area are located within designated "development" parcels on the former Fort Ord, within the jurisdiction of the City of Seaside and County of Monterey. The Fort Ord HMP anticipates losses to these species because of redevelopment; however, with the designated reserves and corridors and habitat management requirements in deeds for the land transfer, the losses of individuals are not expected to jeopardize the long-term viability of this species or its populations on former Fort Ord.

The City of Seaside and County of Monterey, as well as all other land recipients, are required to implement HMP requirements in accordance with the deed covenants. Starting in 1997, the local jurisdictions coordinated with the Service over a period of over 20 years to prepare the Fort Ord HCP to comply with these requirements. The Biological Assessment for the Original PWM/GWR Project and the subsequently issued project specific, PWM BiOp were prepared under the assumption that the HCP would be approved. Therefore, mitigation for the Original PWM/GWR Project required M1W to identify sensitive biological resources that may be salvaged for use in restoration activities in habitat reserve areas, in compliance with the HMP and 2017 Programmatic BiOp. Mitigation for individual populations of these species was not a required component of the HMP or BiOp.

However, in June 2020, the local jurisdictions decided not to approve the Fort Ord HCP and not collectively pursue base-wide incidental take permits and the Service has requested that the local jurisdictions initiate the steps necessary to comply with the HMP. The County of Monterey is currently preparing their Resource Management Plan (RMP) and anticipates approval by the Service at the end of 2022; the status of the required RMP and Borderland Management Plan for the City of Seaside is unknown. Currently, the City of Seaside and the County of Monterey are not yet in compliance with the HMP and 2017 Programmatic BiOp. As such, the M1W recognizes that additional mitigation may be required for the proposed action. Implementation of the following measures are proposed by M1W to reduce or avoid impacts of project actions to Monterey spineflower within and near the Action Area and Monterey gilia near the Action Area.

As the Proposed Action will receive Federal funding, the EPA must consult with the Service under Section 7 of the ESA. As the Monterey spineflower and Monterey gilia are plant species and any potential effects

on this species will occur on non-federal lands, no take authorization is needed for the proposed action. However, the M1W will reduce effects on the Monterey spineflower through the implementation of the Avoidance and Minimization Measures 1-7 and will avoid effects on Monterey gilia through implementation of Avoidance and Minimization Measures 1-6:

1. A qualified biologist must conduct an Employee Education Program for the construction crew prior to any construction activities. A qualified biologist must meet with the construction crew at the onset of construction at the site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which would ensure the safety of the monitor during such activities, 3) the federally-listed species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the Service; and 6) the proper procedures if a federally listed species is encountered within the site.

2. Areas containing federally listed plant species that will not be impacted by the project will be protected prior to and during construction through the use of exclusionary fencing and/or flagging. A qualified biologist will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

3. Any landscaping or replanting required for the project shall not use species listed as noxious by the California Department of Food and Agriculture (CDFA).

4. Bare and disturbed soil shall be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the Action Area.

5. Construction equipment shall be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.

6. All non-native, invasive plant species shall be removed from disturbed areas prior to replanting.

7. To mitigate known construction impacts to Monterey spineflower, the project proponents will consult with the Service and the underlying land use jurisdictions responsible for habitat management in the Monterey County Munitions Response Area (MRA) under the Environmental Services Cooperative Agreement to develop a plan to collect seed or soil containing seedbank (dependent upon the construction schedule) from Monterey spineflower plants that will be impacted during construction for redistribution within the temporary construction easement. The project proponent will finalize the location of this seed collection and redistribution obligation in consultation with the USFWS. The project proponents will create and maintain suitable habitat using a 1:1 ratio and will monitor the area for a three-year period to ensure success of the restoration effort. A Rare Plant Restoration Plan, approved by M1W prior to commencing construction on the component site upon which Monterey spineflower would be impacted, shall be prepared and implemented by a qualified biologist. The plan shall include, but is not limited to, the following:

a. A detailed description of on-site and/or off-site mitigation areas, salvage of seed and/or soil bank, plant salvage, seeding and planting specifications, including, if appropriate, increased planting ratio to ensure the applicable success ratio. Although off-site mitigation areas may be available, the City's ordinance related to Military Munition and deed restrictions prohibit exportation of soil from the site; therefore, offsite areas for mitigation may not be feasible.

b. A description of a 3-year monitoring program, including specific methods of vegetation monitoring, data collection and analysis, restoration goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

Endangered or Threatened Species Evaluation

Proposed determinations are supported by the ***Revised*** *Biological Assessment for the Re-initiation of Consultation for the Pure Water Monterey Groundwater Replenishment Project* (DD&A, June 2, 2022) in Enclosure 1.

Plant Species
USEPA has determined the Project is **likely to adversely affect** Monterey spineflower, and **may affect, but is not likely to adversely affect** Monterey gilia.

Critical Habitat
As previously stated, and further detailed in Enclosure 1, there are no areas of designated critical habitat within the Action Area and thus, the Project **will not affect** critical habitat.

Migratory Birds
Temporary disturbance may occur to foraging migratory birds during construction activities, and if conducted during nesting season, activities such as vegetation removal or site grading could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Operation of the Project is not anticipated to result in impacts to bird species protected by the MTBA. Avoidance and minimization measures adopted as part of the Project MMRP will reduce the effects of the Project on migratory birds such that the Project **may affect, but would not adversely affect,** migratory birds.

We look forward to consulting on any change to the determinations made for the Project. Please provide any comments and concerns you may have within 30 days. EPA will consider them and provide formal responses to comments. Correspondence can be submitted to the EPA contact for this Project, Alaina McCurdy at mccurdy.alaina@epa.gov or (202) 564-6996. Thank you for your review and coordination with EPA on this Project.

Sincerely,

Alaina McCurdy
WIFIA Management Division
Office of Wastewater Management

Enclosures

1. *Biological Assessment for Re-initiation of Consultation for the Pure Water Monterey Project,* prepared by Denise Duffy & Associates, March 7, 2022, including IPaC Species List

cc:

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Attachment F: Updated Biological Opinion Letter, August 2022

United States Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
Ecological Services
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
2022-0061436-S7

August 17, 2022

Alaina McCurdy
Office of Wastewater Management
U.S. Environmental Protection Agency
1301 Constitution Avenue, Northwest
Washington, D.C. 20460

Subject: Reinitiation of Formal Consultation on Monterey One Water's Expanded Pure Water Monterey Project, Monterey County, California

Dear Alaina McCurdy:

This document transmits the U.S. Fish and Wildlife Service's (Service) reinitiated biological opinion based on our review of Monterey One Water's Expanded Pure Water Monterey Project (project) and its effects on the federally threatened Monterey spineflower (*Chorizanthe pungens var. pungens*) and the reinitiated informal consultation on project effects to the federally endangered Monterey gilia (*Gilia tenuiflora ssp. arenaria*). This biological opinion is issued in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.).

The U.S. Environmental Protection Agency (EPA) is requesting reinitiation of consultation for the project, which is proposed for funding under the Water Infrastructure Finance and Innovation Act (WIFIA) program. The U.S. Fish and Wildlife Service issued a biological opinion (2016-F-0523) for the original project on December 20, 2016, and we have updated pertinent sections of that document as it relates to new project activities, and hereby incorporate by reference the original biological opinion (Service 2016) into this reinitiated biological opinion.

We received your March 3, 2022, request for consultation via electronic mail on that same date. We received additional information, which was required in order to complete the consultation, on June 15, 2022. We have based this biological opinion on information that accompanied your March 3, 2022, request, the revised biological assessment (BA) (DD&A 2022), and information in our files.

Not Likely to Adversely Affect Determination

The EPA's request for consultation also included the determination that the proposed action may affect, but is not likely to adversely affect the federally endangered Monterey gilia.

Avoidance and Minimization Measures:

1. A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The Program will include the following: 1) the appropriate access route(s) and review of project boundaries; 2) the federally listed species that may be present; 3) conservation measures that are intended to protect federally listed species; and 4) proper procedures to follow if a federally listed species is encountered within the site.

2. Exclusionary fencing or flagging will be installed to keep construction personnel out of Monterey gilia habitat. A qualified biologist will supervise fence and flagging installation and ensure it remains intact through weekly monitoring.

3. Bare and disturbed soils will be landscaped with California Department of Fish and Wildlife recommended seed mix or plantings from locally adapted species.

4. Prior to arriving at the site, construction equipment will be cleaned of mud and debris to reduce the potential of spreading noxious weeds.

5. All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

After reviewing the information provided, we concur with your determination that the proposed action may affect, but is not likely to adversely affect the Monterey gilia. Our concurrence is based on the following:

1. Surveys in 2019 and 2022 did not detect any Monterey gilia in the action area.

2. The EPA and project proponent commit to implement several avoidance and minimization measures.

Our concurrence with the determination that the proposed action is not likely to adversely affect the Monterey gilia is contingent on the measures outlined above being implemented by the EPA or project proponent. If the EPA or project proponent fails to implement these measures, we will consider our concurrence invalid. If the proposed action changes in any manner or if new information reveals the presence of listed species in the project area, you should contact our office immediately and suspend all project activities until the appropriate compliance with the Act is completed.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

Monterey One Water (M1W) proposes to implement the project, which would provide an additional 2,250 acre-feet per year (AFY) of purified recycled water for injection into the Seaside Groundwater Basin for subsequent extraction. In order to provide an additional 2,250 AFY of treated water, M1W proposes to expand project facilities including improvements at the existing Advanced Water Purification Facility to increase peak capacity; additional water conveyance facilities; additional injection well facilities, including the relocation of previously approved facilities to 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. Please refer to the BA (DD&A 2022) for a detailed description of project activities. Construction is anticipated to begin in October 2022 and be completed in 2024.

Conservation Measures

1. A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The Program will include the following: 1) the appropriate access route(s) and review of project boundaries; 2) the federally listed species that may be present; 3) conservation measures that are intended to protect federally listed species; and 4) proper procedures to follow if a federally listed species is encountered within the site.

2. Exclusionary fencing or flagging will be installed to keep construction personnel out of sensitive habitat. A qualified biologist will supervise fence and flagging installation and ensure it remains intact through weekly monitoring.

3. Bare and disturbed soils will be landscaped with California Department of Fish and Wildlife recommended seed mix or plantings from locally adapted species.

4. Prior to arriving at the site, construction equipment will be cleaned of mud and debris to reduce the potential of spreading noxious weeds.

5. All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

6. All permanent and temporary impacts to Monterey spineflower and its habitat will be compensated for through the development of a Rare Plant Restoration Plan (Plan), that is approved by the Service prior to project implementation. The Plan intends to compensate for permanent and temporary impacts to individuals observed during survey efforts in 2019 and 2022, at a 1:1 ratio, which will be monitored for a minimum 3-year period.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY DETERMINATION

Jeopardy Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. "Jeopardize the continued existence of" means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species" (50 CFR 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the current rangewide condition of the Monterey spineflower, and the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the Monterey spineflower in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the Monterey spineflower; (3) the Effects of the Action, which determines all consequences to the Monterey spineflower caused by the proposed action that are reasonably certain to occur in the action area; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities, that are reasonably certain to occur in the action area, on the Monterey spineflower.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the current status of Monterey spineflower, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both its survival and recovery in the wild by reducing the reproduction, numbers, and distribution of the species.

STATUS OF THE SPECIES

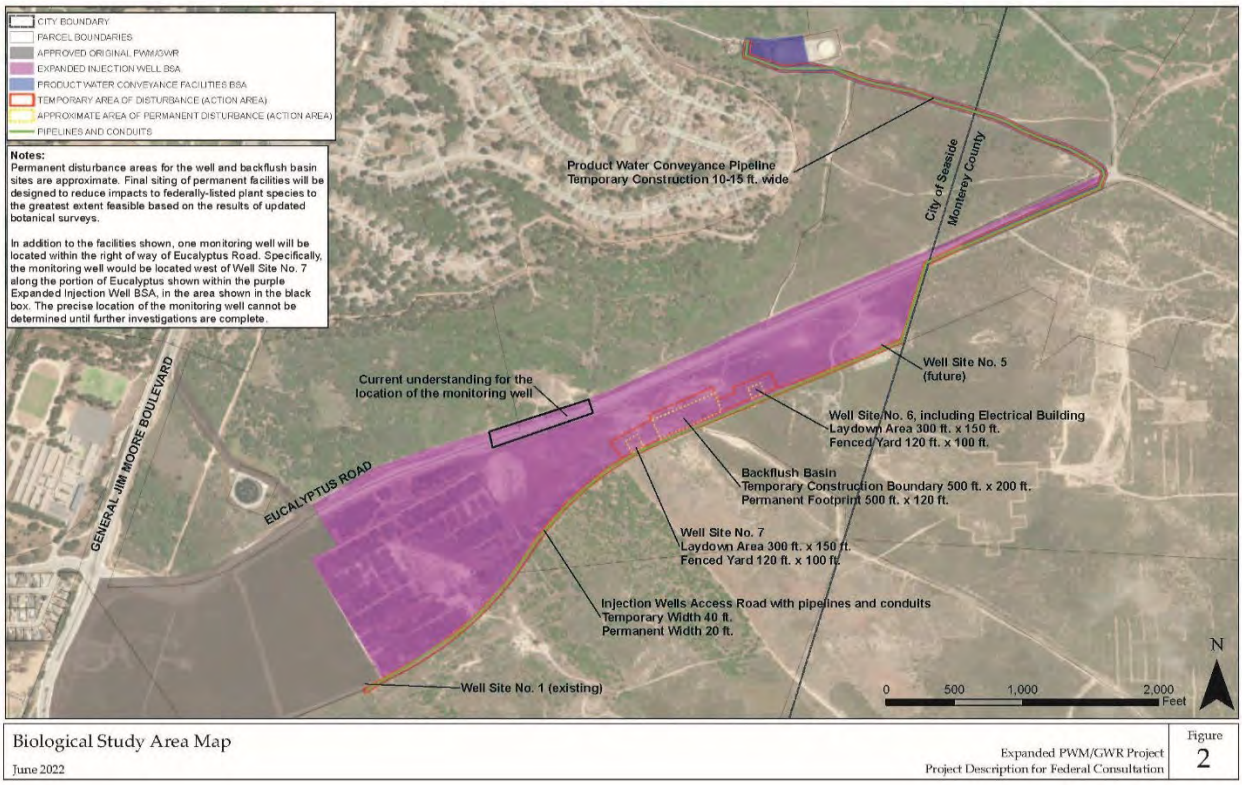
Our original biological opinion (2016-F-0523) (Service 2016, pp. 24-26) includes the status of the species and is hereby incorporated by reference.

ENVIRONMENTAL BASELINE

Action Area

The implementing regulations for section 7(a)(2) of the Act (50 CFR 402.02) define the "action area" as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. The action area includes all areas where permanent and temporary impacts are expected to occur, including all areas that would be involved in restoration activities. Please refer to the figure below (Biological Study Area Map, Figure 2) from the biological assessment (DD&A 2022) for detailed mapping of the action area. Our original biological opinion (Service 2016) describes previous consultations in the action area

(former Fort Ord), general habitat characteristics, and recovery of the species on the former Fort Ord (Service 2016 pp. 29-31), which are applicable to this project, and are hereby incorporated by reference.



Condition (Status) of Monterey Spineflower in the Action Area

Monterey spineflower has been observed within and adjacent to the action area during survey efforts in 2019 and 2022. Please refer to the BA (DD&A 2022, appendix B2-B15) for detailed mapping of Monterey spineflower occurrences in the action area. Occurrences were observed within central maritime chaparral, central coastal scrub, coast live oak woodland, and ruderal habitats.

EFFECTS OF THE ACTION

The implementing regulations for section 7(a)(2) define effects of the action as “all consequences to listed species that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably

certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action" (50 CFR 402.02).

All habitat occupied by Monterey spineflower within the action area (0.2 acre) could be disturbed by project activities. Approximately 0.13 acre of temporary impacts and 0.07 acre of permanent impacts are expected to result from implementation of the project. Temporary and permanent losses of Monterey spineflower individuals would be compensated for at a 1:1 ratio through implementation of the rare plant restoration plan.

We do not expect that the proposed action would substantially affect recovery of the Monterey spineflower. At worst, the project could result in the disturbance or loss of approximately 0.2 acre of occupied habitat. These small effects would be reduced by implementation of a rare plant restoration plan that would compensate for impacts at a 1:1 ratio.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. We do not consider future Federal actions that are unrelated to the proposed action in this section because they require separate consultation pursuant to section 7 of the Act. At this time, we are unaware of any non-Federal actions that are reasonably certain to occur in the action area.

CONCLUSION

Our conclusion is unchanged from the original biological opinion (Service 2016, pp. 36-37). It is the Service's biological opinion that EPA's proposed funding of the Monterey One Water's Expanded Pure Water Monterey Project, is not likely to jeopardize the continued existence of the Monterey spineflower.

INCIDENTAL TAKE STATEMENT

Sections 7(b)(4) and 7(o)(2) of the Act generally do not apply to listed plant species; however, limited protection of listed plants is provided at section 9(a)(2) to the extent that the Act prohibits the removal and reduction to possession of federally listed plants or the malicious damage of such plants on areas under Federal jurisdiction, or the destruction of listed plants on non-Federal areas in violation of State law or regulation or in the course of a violation of a State criminal trespass law.

Additionally, the EPA must continue to comply with the incidental take statement of our previous biological opinion including the specified take levels at which formal consultation for the California red-legged frog (*Rana draytonii*) must be reinitiated (Service 2016, pp. 38-40), hereby incorporated by reference.

REPORTING REQUIREMENTS

Pursuant to 50 CFR 402.14(i)(3), the EPA must comply with the reporting requirements outlined in the original biological opinion's incidental take statement (Service 2016, p. 41), which is hereby incorporated by reference. The report(s) should be sent to fw8venturasection7@fws.gov, and must describe all activities that were conducted under this biological opinion, including activities and conservation measures that were described in the proposed action and required under the terms and conditions, and discuss any problems that were encountered in implementing conservation measures or terms and conditions and any other pertinent information.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. In addition to the conservation measures recommended on page 42 of the original biological opinion (Service 2016), we recommend the following:

1. As a Federal agency subject to section 7(a)(1) of the Act, the EPA should promote the conservation of all federally listed species under the Act. Mitigation that is intended to offset take of listed species or the loss of their habitat should not only offset the effects of the proposed action, but promote the recovery of listed species. We are available to assist you in developing appropriate mitigation or you may use the Service's recovery plans and 5-year reviews where we outline actions needed to promote conservation of listed species. The Act defines "conservation" as "to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary."

The Service requests notification of the implementation of any conservation recommendations so we may be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats.

REINITIATION NOTICE

This concludes formal consultation on the proposed action outlined in the reinitiation request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances

where the amount or extent of incidental take is exceeded, the exemption issued pursuant to section 7(o)(2) may have lapsed and any further take could be a violation of section 4(d) or 9. Consequently, we recommend that any operations causing such take cease pending reinitiation.

If you have any questions about this biological opinion, please contact Chad Mitcham of my staff by electronic mail at chad_mitcham@fws.gov.

Sincerely,

Stephen P. Henry
Field Supervisor

LITERATURE CITED

[DD&A] Denise Duffy and Associates. 2022. Biological Assessment for the U.S. Fish and Wildlife Service, Pure Water Monterey Groundwater Replenishment Project. Re-initiation of Consultation. Monterey, California.

[Service] U.S. Fish and Wildlife Service. 2016. Biological Opinion for Pure Water Monterey Groundwater Replenishment Project, Monterey County, California (2016-F-0523). Ventura Fish and Wildlife Office, Ventura County, California.

[Service] U.S. Fish and Wildlife Service. 2021. 5-Year Review. White-rayed Pentachaeta (*Pentachaeta bellidiflora*). U.S. Fish and Wildlife Service, Sacramento, California. 8 pp.

Attachment G: National Historic Preservation Act Section 106 letter
January 25, 2022

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

January 25, 2022

ELECTRONIC SUBMITTAL

Ms. Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, California 95816

Re: Request for Concurrence on "Section 106" Compliance
Monterey One Water (M1W) Expanded Pure Water Monterey Project
(Expanded PWM Project), Monterey County, California; Water Infrastructure Finance and Innovation Act (WIFIA) Program

Dear Ms. Polanco:

Monterey One Water (M1W) proposes to construct facilities needed for an Expanded Pure Water Monterey (PWM) Project (Expanded PWM Project) in Monterey County, California and is seeking funds from the WIFIA Program to assist in financing the Project. The U.S. Environmental Protection Agency (EPA) administers the WIFIA Program and is the federal lead agency for the Expanded PWM Project. EPA is initiating consultation with your agency to begin the federal review process for the proposed project under Section 106 of the National Historic Preservation Act of 1966, and its implementing regulations found at 36 Code of Federal Regulations (CFR) Part 800.

The Water Infrastructure Finance and Innovation Act (WIFIA) was signed into law in 2014 and authorized the WIFIA program to be managed by EPA Headquarters. WIFIA was amended by section 1445 of the Fixing America's Surface Transportation Act of 2015 and section 5008 of the Water Infrastructure Improvements for the Nation Act of 2016. WIFIA is a federal credit program for eligible water and wastewater infrastructure projects. EPA selected M1W to submit an application for credit assistance for the Expanded PWM Project. On December 30, 2021, M1W submitted their application and WIFIA staff is currently reviewing the application. M1W has also applied to the State Water Resources Control Board for a State Revolving Fund loan or an extension of its existing loan for the project, and to the U.S. Bureau of Reclamation for additional grant money through their WaterSmart / Title XVI program.

For the original or "base" PWM Project (also referred to as the PWM/Groundwater Replenishment (GWR) Project), M1W secured a Clean Water State Revolving Funds (CWSRF) from the State Water Resources Control Board (State Board) (Project No. C-06-8028-110). The State Board submitted their request for section of the project for review on March 3, 2016, with a finding of no historic properties affected. On April 19, 2016, SHPO concurred with the finding assigning the reference number EPA_2016_0304_001. On February 12, 2018, the State Board notified SHPO of project changes, stated

that they determined that a finding of No Historic Properties Affected remained appropriate for the amended project, and requested the SHPO review and comment on it. After reviewing the submitted information, the SHPO concurred in a letter dated. The two CWSRF consultation letters and SHPO concurrence letters can be found in Enclosure 1.

Description of Undertaking

The base PWM/GWR Project is included as part of the WIFIA loan but is not discussed in detail further as it is constructed and operational (subject of existing 2016 and 2018 letters of concurrence in Enclosure 1). In addition to the base PWM/GWR Project, the following additional components would be constructed as part of the current Undertaking. The Expanded PWM Project includes two components discussed below.

Advanced Water Purification Facility (AWPF) Expansion Component. The Expanded PWM Project would expand the AWPF 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). Modifications would include installation of additional treatment and pumping equipment, chemical storage, pipelines, and facility appurtenances within the 3.5-acre existing building area. No new ground disturbance nor changes to the AWPF buildings or overhanging canopies are proposed as part of the Expanded PWM Project. All ground disturbance and construction of structures occurred during construction of the base project in 2018 to 2019. Ground disturbance, concrete work, and building/canopy construction, including the depth and heights of construction and permanent facilities, are not being modified for the Expanded PWM Project; therefore, no new APE is defined for this component below. A detailed description is provided in Enclosure 2.

Injection Well Facilities Phase 4 (incl. Conveyance Facilities). The Expanded PWM Project would include construction and operational of additional product water conveyance facilities, specifically, a new product water conveyance pipeline and appurtenances extending from the existing Blackhorse Reservoir to an Expanded Injection Well Area. Water conveyance components would be a new 2.3 mile long, 24-inch diameter pipeline. The northern part of the pipeline would be located within an existing unpaved access road servicing an in-place utility site. The southern portion of the pipeline would be located within the existing paved area of Eucalyptus Road and existing injection well access road.

The Expanded PWM Project includes 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 will include construction and operation of additional Injection Well facilities incl. two deep injection wells, electrical and mechanical equipment at Well Sites #6 and #7, additional monitoring well, and an additional backflush pipelines and percolation basin. A detailed description is provided in Enclosure 2.

Undertaking Objective

The Expanded PWM Project purpose is to replace and augment water supplies for the Monterey Peninsula area customers of California American Water Company by expanding the base PWM/GWR Project advanced water purification facility and injection capacities. With the increased capacity, M1W

would also be able to divert additional excess secondary effluent currently being discharged to the ocean; thereby reducing pollutant loads.

Undertaking Location

The Expanded PWM Project is located in northern Monterey County, including within unincorporated parts of the county adjacent to the City of Seaside and within the city itself, as shown in Enclosure 2 (Figures 1 and 2).

Area of Potential Effects

The Area of Potential Effects (APE) for Archaeology includes the area within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, should any be present within the APE. The horizontal and vertical APE consists of the proposed construction within the project's development footprint and proposed improvements. As stated above, there is no new APE for the AWPF Expansion.

The APE for the new injection well facilities includes the entire Expanded Injection Well Area, and a pipeline starting at the existing (base) PWM Project's "Blackhorse Reservoir" and continuing to and past the new injection well sites (no new well is currently proposed at Well Site #5) to the existing Well Site #1 constructed as part of the base project. Within this area, the undertaking includes construction of two new injection wells each (with required electrical/control facilities, fencing, and appurtenances) at Well Sites #6 and #7, a backflush basin, and a new monitoring well within the Eucalyptus Road right of way.

The APE for the conveyance pipelines extends from the well sites to the Blackhorse Reservoir. The vertical APE for the proposed conveyance pipeline trenches and other improvements (e.g., basins, enhancements to existing gravel roads over the pipeline and conduits, utilities, etc.) would be at most 50 feet below existing grade due to the use of horizontal directional drilling (HDD) for approximately 2,200 feet of the conveyance pipeline. The APE is described and shown in Enclosure 2 (Section 2-2 and Figure 3-1, respectively). A summary of construction/temporary disturbance and permanent facility dimensions is provided in the following table.

Construction Area of Disturbance and Permanent Footprint

Project Component	Construction Boundary (feet)		Permanent Component Footprint (feet)			
	Length	Width	Length	Width	Maximum Height	Maximum Depth Below Ground Surface
Product Water Conveyance Pipeline						
Blackhorse Reservoir to first Injection Well (Well Site #5)	5,280	10-15	5,280	<6	0	10
Injection Well Facilities (on-site conveyance)						
Well Site #6 Facilities including: one deep injection well, motor control building, and transformer	300	150	130	100	15	1,050
Well Site #7 Facilities including: one deep injection well, motor control building, and transformer	300	150	100	100	15	1,050
Backflush Basin (a light post and the outlet pipe are above-ground facilities)	500	200	500	120	20	10
One monitoring well (no above ground facilities)	100	100	3	3	0	1,000
Access Roads to Injection Wells, including underground pipelines listed separately & electrical	8,400	40	8,400	20	0	10
Purified water, backflush pipeline and electrical conduit from Well Site #5 to Well Site #1	4,600 (incl. up to 2,400 ft installed with HDD*)	10-15	4,600	<6	0	50*
Backflushing Pipelines	2,000	10-15	2,000	<6	0	10
Electrical conduit in General Jim Moore Blvd and, if needed, Eucalyptus Rd.	560	10	560	3	0	6

*A portion of the pipeline will be installed using horizontal directional drilling (HDD). This segment is between Well Site #1 and Well Site #5. The pipe will be installed to a maximum depth of 50 feet below ground. Horizontal directional drilling requires the excavation of a pit on either end of the pipe alignment that measures approximately 15 feet wide and 50 to 80 feet long (sloping from 10 feet deep to the existing grade at the far end).

Summary of Identification Efforts

M1W contracted Basin Research Associates to complete a cultural resources study (Enclosure 2). The study includes the results of record searches at the California Historical Resources Information System (CHRIS), Northwest Information Center (NWIC), Sonoma State University, a review of archival materials on file with BASIN for the former Fort Ord and Monterey County, a Sacred Lands File (SLF) search completed by the Native American Heritage Commission (NAHC), Native American and historical society outreach, and results of a field survey. In addition, a reasonable and good faith effort has been made to identify historic properties and unique archaeological resources listed, determined, or potentially eligible for inclusion on the National Register of Historic Places (NRHP) within or immediately adjacent to the APE.

- The CHRIS/NWIC records review noted 11 previous cultural resources studies for the APE with negative results. No prehistoric and/or historic era archaeological sites are within in or adjacent to the APE.

  One reported prehistoric archaeological site, CA-MNT-280/P-27-00385, <u>without a definite location</u> (emphasis added) was recorded in 1950 for an area including a larger area of the former Fort Ord that includes the APE. The site form notes that the site was destroyed by

bulldozing ca. 1940, likely destroyed during Fort Ord Army base construction. No further information is available.

- No Native American villages, traditional use areas or contemporary use areas or other features of significance have been previously identified in or adjacent to the proposed Expanded PWM Project APE.
- No Hispanic era features have been identified in or adjacent to the project APE.
- No American Period archaeological sites have been recorded, reported, or identified in or adjacent to the project APE.
- The two archaeological field inventories completed by Basin Research Associates (2019 and 2021) noted no prehistoric or historic cultural resources. The location of the eastern injection well field had been subject to UXO remediation resulting in considerable surface and subsurface disturbance.
- Research suggests a low potential for the presence of subsurface prehistoric and/or historic deposits either within or adjacent to the APE.
- No listed or known potential NRHP are located in or adjacent to the APE. No other significant or potentially significant local, state, or federal cultural resources/historic properties, landmarks, points of interest, etc. have been identified in or adjacent to the Expanded PWM Project APE.

Native American and Interested Party Consultation

Native American outreach and consultation occurred in 2019 for the proposed Expanded PWM Project (Busby 2019a). The review of the NAHC SLF was negative and 12 Native Americans were contacted for additional information with two Tribes responding. One tribe (Xolon Salinan People) responded noting the area was not part of their traditional lands while the other tribe (Esselen Tribe of Monterey County) requested that the Tribe be consulted should cultural resources be encountered during construction (Busby 2019n). The NAHC was contacted for a review of the SLF (Busby 2021a) to supplement the previous 2019 outreach. The 2021 NAHC review of the SLF was negative for Native American resources in or adjacent to the Expanded PWM Project (Sanchez 2021). Letters soliciting additional information were sent to the 15 Native American individuals/groups recommended by the NAHC (Busby 2021b-p) (see Attachments).

Responses were limited to communications from Ms. Susan Morley, representing the Esselen Tribe of Monterey County (ETMC), who responded via email on August 2, 2021, regarding the notification of Tom Little Bear Nason, Jana Nason, Susan Morley, and Brenna Wheelis about the project (Morley 2021a-d). A copy of the Technical Memorandum - Cultural Resources Assessment – for Supplemental EIR for Expanded Pure Water Monterey Groundwater Replenishment (PWM/GWR) (Busby 2019n) - was forwarded for her review. No other responses were received. (See Enclosure 2).

Summary of Findings

No historic properties were identified in the APE. A reasonable and good faith effort has been made to identify historic properties listed, determined, or potentially eligible for inclusion on the NRHP (36 CFR Part 800.4) within or immediately adjacent to the APE pursuant to the NHPA of 1966 (as amended) (54 U.S.C. § 306108) and its implementing regulations 36 CFR Part 800. The identification effort included a records search, a literature review, a field inventory, and Native American outreach. The regulations implementing Section 106 define an effect as any action that would alter the characteristics of the property that may qualify the property for inclusion in the NRHP and diminish the integrity of a

property's location, setting, design, materials, workmanship, feeling or association (36 CFR Part 800.5(a)(1-2)). A finding of No Historic Properties Affected (36 CFR Part 800.4(d)(1)) is recommended as the installation of the injection wells and associated pipeline and other project improvements will not have an effect on any historic properties within the APE as defined in 36 CFR Part 800.5(a)(1), 800.5(b), and 800.16(i).

EPA Finding of Effect

Consistent with substantive portions of section 106 of NHPA (36 CFR 800.4[d][1]), EPA has applied the evaluation criteria of adverse effects and found that this proposed undertaking will not affect historic properties ("no historic properties affected").

We look forward to receiving your concurrence on the APE and our finding of "no historic properties affected" on this undertaking. Please provide any comments and concerns you have within 30 days. EPA will consider them and provide formal responses to comments. Correspondence can be submitted electronically to the EPA contact for this project. Please feel free to contact me at (202) 564-6996 or mccurdy.alaina@epa.gov.

Sincerely,

Alaina McCurdy
WIFIA Management Division
Office of Wastewater Management

Enclosures (2)

1. *CWSRF Section 106 Consultation - State Historic Preservation Office Concurrence Letters (applicable to Pure Water Monterey Groundwater Replenishment Project)*
2. *Historic Property Survey Report/Finding of Effect Expanded Pure Water Monterey Groundwater Replenishment Project: Expanded Injection Well Area and Product Water Conveyance Facilities City of Seaside and Unincorporated Monterey County, California* (Basin Research Associates, December 2021)

cc:

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Attachment H: State Historic Preservation Office concurrence letter
February 17, 2022

State of California • Natural Resources Agency Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION Armando Quintero, *Director*
OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
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February 17, 2022

In reply refer to: EPA_2022_0125_001

VIA ELECTRONIC MAIL

Ms. Alaina McCurdy
WIFIA Management Division
Office of Wastewater Management
U.S. Environmental Protection Agency
Washington, D.C. 20460

RE: Section 106 consultation for the proposed Monterey One Water (M1W) Expanded Pure Water Monterey Project (Expanded PWM Project), Monterey County, California.

Dear Ms. McCurdy:

The United States Environmental Protection Agency (EPA) is consulting with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulation at 36 CFR Part 800. The EPA is requesting SHPO review and comments on their finding of *no historic properties affected*.

The EPA is considering issuing funds through their Water Infrastructure Finance and Innovation Act (WIFIA) program to the Monterey One Water (applicant) for their Expanded Pure Water Monterey (PWM) Project (undertaking) within and adjacent to the City of Seaside, Monterey County, California.

The proposed undertaking will expand the Advanced Water Purification Facility and construct a new Injection Well Facility. The new Injection Well Facility would require a new 2.3-mile water conveyance pipeline from the Blackhorse Reservoir to the Expanded Injection Well Area.

The proposed undertaking also includes what the EPA refers to as the "base PWM/GWR Project." The SHPO consulted on the base PWM/GWR Project in 2016 and 2018 when the Monterey One Water secured funding through the State Water Resources Control Board (OHP file EPA_2016_0304_001). This consultation is for the Expanded Pure Water Monterey Project that the SHPO has not consulted on.

The Area of Potential Effects (APE) for the Expanded PMW Project is roughly 75 acres and includes the Expanded Injection Well Area and water conveyance pipeline to Blackhorse Reservoir. The vertical APE is 50 feet deep to account for the maximum depth of ground disturbing activities.

Along with your letter, you submitted the following document:

- *Historic Property Survey Report/Finding of Effect: Expanded Purewater Monterey Groundwater replenishment Project, Expanded Injection Well Area and Product water*

Conveyance Facilities, City of Seaside and Unincorporated Monterey County, California. Prepared by Basin Research Associates. December 2021.

Efforts to identify historic properties that might be affected by the undertaking included a record search at the Northwest Information Center, pedestrian archaeological survey, and Native American consultation conducted by the applicant's consultant.

Native American consultation included the applicant's consultant contacting the Native American Heritage Commission (NAHC) and requesting a search of their sacred lands file and list of all tribes that have ancestral ties to the area. The NAHC responded with a negative search of their sacred lands file. The applicant's consultant sent initial consultation letters to all tribes identified by the NAHC as having ancestral ties to the area. None of the tribes expressed concern regarding the undertaking.

The EPA's identification efforts resulted in identifying no historic properties within the APE.

The EPA has made a finding of *no historic properties affected* for this undertaking and has requested SHPO review and comment. Pursuant to 36 CFR § 800.4(d)(1), **I do not object** to a finding of *no historic properties affected* for this undertaking and have no further comments.

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, the EPA may have additional future responsibilities for this undertaking under 36 CFR Part 800. If you require further information, please contact Jeffrey Delsescaux at (916) 445-7016 or Jeffrey.Delsescaux@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Attachment I: CWSRF consultation letters and SHPO concurrence letters, 2016-2018

MAR 0 3 2016

Ms. Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

REQUEST FOR CONCURRENCE ON "SECTION 106" COMPLIANCE AND A FINDING OF "NO HISTORIC PROPERTIES AFFECTED" FOR THE PURE WATER MONTEREY GROUNDWATER REPLENISHMENT PROJECT (GWR PROJECT); MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY (AGENCY); MONTEREY COUNTY (COUNTY), CALIFORNIA; CLEAN WATER STATE REVOLVING FUND (CWSRF) NO. C-06-8028-110

Dear Ms. Polanco:

State Water Resources Control Board (State Water Board) staff have reviewed the cultural resources documents provided for the GWR Project and is requesting your concurrence that the enclosed cultural resources studies/information are adequate and complete, and that no historic properties will be affected by the described undertaking. We are seeking comments from your agency to complete the federal review process for the above-mentioned GWR Project under Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106). Enclosed are copies of cultural resources documents prepared by the Agency for the proposed Project to comply with Section 106 requirements.

The State Water Board, Division of Financial Assistance administers the CWSRF Program pursuant to 40 Code of Federal Regulations (CFR) Part 35, and the Agency is seeking funds from this program to assist in financing the GWR Project. The CWSRF Program is partially funded by a capitalization grant from the United States Environmental Protection Agency (USEPA) and issuance of CWSRF funds is considered an undertaking pursuant to § 800.16(y), thereby necessitating compliance with Section 106 under a Nationwide Programmatic Agreement executed for the CWSRF by the USEPA, the Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers. The USEPA has delegated lead agency responsibility to the State Water Board for carrying out the requirements of Section 106.

The GWR Project includes two Action Areas under the jurisdiction of the United States Army Corps of Engineers (USACE) within the Area of Potential Effect (APE) for the construction of surface water diversion structures at two geographically separate areas due to discharge of fill material (soil, concrete, rip-rap). The USACE has provided formal notification of concurrence for the State Water Board (under agreement with the USEPA) to assume the role of lead federal agency in SHPO consultation for the GWR Project. The USACE will require a copy of the final SHPO concurrence letter for the issuance of a 404 permit for the GWR Project.

Proposed Action Summary and Objective

The GWR Project is a water supply project that would serve northern Monterey County. The Proposed 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 agricultural irrigation supply. The primary objective of the 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 orders. A Project vicinity map is shown in Enclosure 1 and an overview of the Proposed Action is shown in Enclosure 2.

- *Replenishment of the Seaside Groundwater Basin.* The GWR 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 (CSIP) 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 GWR Project could provide up to 5,900 acre feet per year for crop irrigation.

The GWR Project would require modifications to existing facilities and construction of new 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. *At the October 8, 2015 MRWPCA Board public hearing, the Board approved all of the diversions; however, the Tembladero Slough and the Lake El Estero Source Water Diversion Sites are not included within the CWSRF Proposed Action*[1].

[1] Although Tembladero Slough and Lake El Estero source water diversions were included as a component of the GWR Project in the EIR and in the MRWPCA's October 8, 2015 project approval action (MRWPCA Resolution 2015-24), the resolution acknowledged that MRWPCA and their partner agency may not include these facilities in the initial phase of the Project, in particular they may not be included in permit applications, loan applications, and/or grant applications. These facilities provide only a small benefit to project yields (i.e., 500 to 750 acre feet during some drought years for

(footnote continued on next page)

- *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 brine disposal facilities. There would also be modifications to the existing Salinas Valley Reclamation Plant to optimize and enhance the delivery of recycled water for crop irrigation in the Castroville Seawater Intrusion Project area.
- *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. *At the October 8, 2015 MRWPCA Board public hearing, the Board approved the pipeline alignment and booster pump station for the Regional Urban Water Augmentation Project (RUWAP) and not the Coastal pipeline alignment and booster pump station. The Proposed Action for the CWSRF application, therefore, includes only the RUWAP alignment option. The RUWAP alignment was the subject of the attached Letter of Concurrence from SHPO dated March 24, 2008, for portions of the RUWAP alignment within the Marina Coast Water District Recycled Water Project, Monterey County, California (within Enclosure 7)*
- *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.

In addition to excluding the Tembladero Slough and Lake El Estero Source Water Diversions, the Proposed Action for the CWSRF application would *not* include the CalAm Distribution System: Monterey Pipeline and Transfer Pipeline, nor the Alternative Monterey/Transfer Pipelines that are evaluated in the GWR Project Environmental Impact Report (EIR) (October 2015). These facilities would be constructed by a private water supply company, namely CalAm, and are not within the control of the Agency, therefore are not part of the proposed undertaking.

Project Location

The Proposed Action for the CWSRF application would be located within northern Monterey County and would include new facilities located within unincorporated areas of Monterey County and the cities of Salinas, Marina, and Seaside. See Enclosures 1 and 2.

Project Description and Construction Activities

The Project construction activities include all of the activities at each of the separate locations stated below and the corresponding construction area of disturbance and permanent footprint (Table 1):

1. **Salinas Pump Station Diversion**
   - Open excavation within the existing facility, new vaults cast-in-place around existing pipelines.
   - New pipelines installed by open excavation connecting the new vaults.

(footnote continued from previous page)
CSIP irrigation); therefore, are not proposed to be built or operated within the timeframe of the remainder of the components and permits for those facilities are not being pursued.

2. **Salinas Treatment Facility Storage and Recovery**

Recovery Pump Station

- Open excavation within the existing facility, new pump station wet well adjacent to the existing pump station at the east end of the site.

Recovery Pipeline

- Existing 33-inch pipeline will be slip-lined with a new 18-inch pipe
- Open excavation for sending/receiving pits at each end and every 600-800 feet along the pipeline. Pits will be located in either the existing pump station sites, within existing road rights-of-way or under agricultural land, depending on the stationing.
- The Recovery Pipeline starts at the existing Salinas Industrial Wastewater Treatment Facility pump station, located on S. Davis Road and follows a straight line to the Salinas Treatment Plant 1 (TP1) site, located on Hitchcock Road.

Pond 3 pump station and inlet structure

- Open excavation within the existing facility, adding a new wet well and inlet structure at the west end of treatment pond #3.

Pipeline from Pond 3

- Open excavation within the existing facility.
- New pipeline will connect the Pond 3 pump station and the Recovery pump station, running along the north side of treatment ponds 1, 2 and 3.

3. **Reclamation Ditch Diversion**

- Open excavation to install new intake structure, new wet well and new pipeline to connect to existing sanitary sewer main.
- New pump station will be constructed approximately 60-ft from the receiving sanitary sewer manhole.
- Site has been previously disturbed by the adjacent railroad, construction of the Davis Road overpass, construction of the Salinas sanitary sewer siphon and realignment of the Reclamation Ditch. The Reclamation Ditch is maintained as a trapezoidal channel.

4. **Blanco Drain Diversion**

Diversion Pump Station

- Open excavation to install new intake structure, new wet well and new pipeline.
- New pump station will be constructed adjacent to the existing MCWRA pump station.
- The Blanco Drain is maintained as a trapezoidal channel.

Force Main and Gravity Pipeline (includes pipelines located at the Regional Treatment Plant)

- Open excavation to install the majority of the new pipeline. The segment crossing the Salinas River will be installed using trenchless methods (directional drilling), with sending/receiving pits on either side.
- The pipeline will start at the new pump station and follow the farm road on the west bank of the Blanco Drain to the point the pipeline crosses the Salinas River. On the south side of the river, the pipeline will run north-west and then south-west under existing farms roads, then cross a portion of Monterey Regional Waste Management District landfill, and finally a portion of the Agency Regional Treatment Plant to the point it joins the existing Salinas Interceptor pipeline.

5. Treatment Facilities at Regional Treatment Plant

AWT (Advanced Water Treatment) Facility (*Brine Mixing Facility, Pipelines, AWT product water pump station)*

- The new AWT Facility will be installed using open excavation within the existing Agency Regional Treatment Plant. The 3.5 acre site is currently a mix of paved and unpaved areas.
- Portions of the work will include cast-in-place concrete structures around existing pipelines.

Salinas Valley Reclamation Plant modifications

- Internal modifications will be made to the existing reclamation plant, which includes a mix of concrete structures, paved and unpaved areas.

Salinas Valley Reclamation Plant pipeline

- A new pipeline will be installed under the existing recycled water storage pond using open excavation, and the existing inlet and outlet structures will be modified, to allow seasonal delivery of recycled water without using the storage pond.

6. Product Water Conveyance Facilities

Product Water Pipelines

- The new product water pipeline will be installed using open excavation methods.
- The pipeline will start at the AWT Facility and proceed to the southern boundary of the Agency Regional Treatment Plant under existing roads and pavements.
- The pipeline will proceed south across undeveloped lands owned by MCWD and the Armstrong Ranch to the City of Marina. The alignment follows existing farm roads.
- The pipeline follows street rights of way through Marina: Crescent Ave, Carmel Ave, Vaughn Ave, Reindollar Ave, California Ave/5th Ave, and connects to an existing pipeline segment, previously installed in Inter-Garrison Road (3rd St) and 5th Ave on the CSUMB Campus.
- The pipeline construction resumes at 5th Ave at A Street, and proceeds southwest under unpaved roads within CSUMB to General Jim Moore Blvd. It then procedes south in General Jim Moore Blvd to Normandy Rd, where it connects to an existing recycled water pipeline.
- The final pipeline segment will connect the recycled water main in General Jim Moore Blvd to the injection well field. The alignment considered in the Project EIR branched southeast from General Jim Moore Blvd opposite Seaside Middle School and crossed an undeveloped area before crossing Eucalyptus Road and entering the injection well field. In the final design, this pipeline may be realigned to run under Eucalyptus Road itself.

Booster Pump Station (5th Avenue Site)

- The new booster pump station and associated pipelines will be installed using open excavation methods. The building foundation and pump wells will be cast in place.
- The pump station is located at the existing City of Marina Corporation Yard in a paved area.

7. Injection Well Facilities

- All of the injection well facilities will be installed by open excavation, except the wells themselves which will be by conventional rotary drilling. Above-grade facilities will have cast-in-place concrete floors or pads.

- The injection well field is located in an area previously used as small arms ranges when Fort Ord was as active base. The well clusters are located along the southeast boundary of the parcel, which borders with the BLM Fort Ord National Monument.
- The pipelines and conduits will be installed under existing unpaved roads. Conduits will also be installed along General Jim Moore Blvd and/or Eucalyptus Road to reach the existing PG&E service.
- A single percolation pond for well backwash water is proposed, to be located between the second and third well cluster, adjacent to the access road and pipeline corridor.
- Groundwater monitoring wells will be installed along existing unpaved roads.

Table 1
Construction Area of Disturbance and Permanent Footprint

Project Component	Construction Boundary (feet)		Permanent Component Footprint (feet)			
	Length	Width	Length	Width	Maximum Height (above ground surface)	Maximum Depth (below ground surface)
Source Water Diversion and Storage Sites						
Salinas Pump Station Diversion (several discrete trenches and pits totaling 0.75 acres)	175	175	30	25	0	20
Salinas Treatment Facility Storage and Recovery						
Recovery Pump Station	50	50	30	15	10	10
Recovery Pipeline (Note 1)	500	20	7,700	<6	0	10
Pond 3 pump station and inlet structure	50	50	15	30	10	20
Pipeline from Pond 3	6,000	20	6,000	<6	0	10
Reclamation Ditch Diversion	120	50	80	20	10	20
Blanco Drain Diversion						10 (trenched sections); 25 (trenchless sections and pits)
Diversion Pump Station	50	50	50	20	10	
Force Main and Gravity Pipeline (including pipelines located at the Regional Treatment Plant)	8,500	20	8,500	<6	0	
Treatment Facilities at Regional Treatment Plant						
AWT Facility	600	450	500 (triangular)	350	31	10
Brine Mixing Facility					16	31
Pipelines, AWT product water pump station					0	15
Salinas Valley Reclamation Plant modifications	700	400	600	300	25	10
Salinas Valley Reclamation Plant pipeline	900	20	900	<6	0	10
Product Water Conveyance Facilities						
Product Water Pipelines						10 (trenched sections); 25 (trenchless sections and pits)
RUWAP AWT to Booster Pump Station	*28,000*	*10 – 15*	*28,000*	*<6*	*0*	
RUWAP Booster Pump Station to Injection Wells	*18,900*	*10 – 15*	*18,900*	*<6*	*0*	
Booster Pump Station (one of two optional sites)	*100*	*60*	*80*	*60*	*25*	10
Injection Well Facilities						
Well cluster, including: one Deep Injection Well, one Vadose Zone Well, motor control building, transformer, and space for replacement wells (4)	100	100	85	90	15	1,050 (Deep) 600 (Vadose)
Back-flush basin	280	150	225	125	2-3 for pipe outlet only	10
Monitoring wells, including: up to six well clusters with two wells at each site (6)	100	100	3	3	0	900
Access Roads to Injection Wells, including: underground pipeline & electrical	4200	40	4200	20	0	10
Electrical conduit along Eucalyptus Rd.	1200	10	1200	3	0	6
Access roads to monitoring wells	1000	20	1000	10	0	2

Note 1: The existing 33-inch industrial wastewater conveyance pipeline would be slip-lined with the new 18-inch recovery pipeline. This would require the excavation of up to 12 sending/receiving pits measuring approximately 60-feet long by up to 20-feet wide.
Note 2: Pipeline trenches would generally be no more than seven (7) feet wide, except in areas with sandy soils and lack of constraints to a wider trench. Constraints include known sensitive or protected resources, geography such as steep slopes, existing utilities, buildings, or other facilities that restrict the construction area. A trench section with a ground surface width of up to approximately 10 to 15 feet would be potentially used in some soil types to increase efficiencies related to shoring the trench.

Methodology Employed for the Identification of Historic Properties

The State Water Board staff reviewed the cultural resource documents submitted by the Agency.

In April 2015, the Agency, as the California Environmental Quality Act (CEQA) Lead Agency, circulated a Draft EIR prepared under CEQA, Public Resources Code §21000 et seq. The Draft EIR was prepared to provide the public and responsible and trustee agencies with information on the potential environmental effects of implementation of the GWR Project. The Draft EIR was circulated for a 45-day public review period, between April 22 and June 5, 2015, including posting the Notice of Availability with the Monterey County Clerk, emailing approximately 700 agencies, organizations and individuals, publishing legal notices with newspapers of general circulation, and providing the required number of copies to the Governor's Office of Planning and Research (OPR).

The Agency prepared a Final EIR (comprised of the Draft EIR, comments on the Draft EIR, responses to those comments, and changes to the text of the Draft EIR) and on September 25, 2015, they distributed the Final EIR consistent with the Draft EIR distribution, including sending the Final EIR to all the entities that commented on the Draft EIR. During a public hearing on October 8, 2015, the Agency Board certified the EIR (State Clearinghouse No. 2013051094), and filed a Notice of Determination with the Monterey County Clerk and with OPR.

To comply with Section 800.4(b) for the GWR Project, the Agency's environmental consultant, Denise Duffy & Associates, contracted with Archaeological Consulting[2] and later in 2015 with Pacific Legacy[3] to complete the tasks listed below and prepare documentation required for compliance:

- An archival and records search was performed by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), located at Sonoma State University (response received March 19, 2014). This is included in Enclosure 5, the Doane and Breschini (2015a) survey report as Attachment 2;
- Searches of the Sacred Lands Inventory were conducted (March 2014) by the Native American Heritage Commission (NAHC) for the Project area as it was defined in 2014. A response was received on March 6, 2014 from Katie Sanchez of the NAHC (see Attachment 3 of Enclosure 5);[4]
- Written contact with the NAHC and potential Native American stakeholders was initiated for the Project area as it was originally defined (March 2014). Contact with potential stakeholders also was conducted by letter, email, and telephone (March 2014). Attachment 3 of Enclosure 5 contains the correspondence letters and maps provided during consultation.

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[2] Resumes for staff from Archaeological Consulting are contained within Enclosure 3.

[3] A Statement of Qualifications for Pacific Legacy is provided in Enclosure 4.

[4] No specific site information found in their files regarding the project area, which lies within traditional Ohlone territory. She recommended that additional contact be made with other Native American sources of information regarding the potential for cultural resources in the project area. Because these Native American peoples are not a federally recognized tribe, there is no single person or group who represents all of them. A sample copy of the letters regarding the GWR Project were sent on March 6, 2014 to the Native American contacts on the NAHC list (see December 2014 Phase 1 Archaeological Survey Report in Appendix J of the Draft EIR for the GWR Project).

- A systematic pedestrian reconnaissance-level cultural resource field survey of the Project area that were not previously subject to archaeological survey was completed on April 3, April 21, 2014 and March 2015. The report was updated in of 2015 (Enclosure 5, Doane and Breshcini 2015a); and
- Preparation of a Phase 1, Archaeological Survey Report, including documentation of Native American consultation, results of the literature review, results of survey of the Project area that was not previously subject to archeological survey, and, findings. The report was updated in April, 2015 (Enclosure 5, Doane and Breschini 2015a). In March 2015, Archaeological Consulting prepared a supplemental memorandum regarding two changes to the APE map (Enclosure 6, Doane and Breschini 2015b); and,
- A supplemental Section 106 report completed by Pacific Legacy Inc. in November, 2015 is included as Enclosure 7. This supplement included responding to specific questions and information requests from SWRCB staff regarding the GWR Project. Within Enclosure 7 are the following:

    - The October 2015 Area of Potential Effect maps (on aerial photography and topographic mapping)
    - A map showing all CHRIS site records from the Northwest Information Center at Sonoma State on USGS, 1:24,000 scale topographic base map
    - Record of recent Native American Consultation with Louise Miranda-Ramirez of the Ohlone/Costanoan-Esselen Nation on November 12, 2015, including providing her with the updated APE map.
    - SHPO letter of concurrence for the RUWAP Product Water Conveyance Pipeline (March 24, 2008).

- Two referenced archaeological reports as supporting information for the March 24, 2008 SHPO letter of concurrence for the RUWAP Product Water Conveyance Pipeline for the Marina Coast Water District (Enclosure 9).

Area of Potential Effect (APE)

Enclosure 7 contains mapping and descriptions of the current APE (October 2015). The APE provided represents the Archaeological and Architectural/Structural APE determined for the GWR Project. The current APE is smaller than the November 2014 (amended in March 2015) as shown in Enclosures 5 and 6. A brief description of the APEs follows:

Archaeological APE

Depending upon the GWR Project components, the archaeological APE has been determined as the area of direct impact for the Project including areas of ground disturbance. For each Project component the horizontal and vertical APE is different. Table 1, above, summarizes the horizontal and vertical APE's for facilities within each component. This includes Source Water Diversion and Storage Sites, Treatment Facilities at Regional Treatment Plant, Product Water Conveyance Systems, and Injection Well Facilities. In general, excavation for pipelines will include an area of direct impact for installation of the pipeline (component footprint) as well as a work area (construction boundary). An approximate width has been delineated as the APE in undeveloped areas. For pipelines that will be installed below (within) existing roadways, the APE is the varying width of the road right-of-way. The vertical and horizontal APE is shown in detail on Figures M-1 through M-10 (Enclosure7, Appendix A) and summarized in Table 1. No excavation or grading will occur in the staging areas; therefore staging area APEs, that are included in the areas shown on the figures, will include the horizontal extent and a minimal depth (less than 6 inches) from potential disturbance relating to the placement and movement of personnel and heavy equipment.

Architectural/Structural APE

The architectural/structural APE for the GWR Project within developed areas includes the area of direct impact and varying width of the road right-of-way (typically 50–75 feet from curb to curb). In the case of Project components that would be located within undeveloped areas, the architectural/structural APE is 25 feet from the centerline of the pipeline or a 25-foot buffer from a GWR Project component or staging area.

Other considerations for determining the architectural/structural APE include the potential for temporary vibration effects from excavation and construction, such as the use of equipment or construction methodologies with the potential to generate vibration levels of 0.2 inches per second peak particle velocity (PPV). Construction-related vibration, such as open-trenching, directional drilling, and vibratory rollers or compactors, can cause structural damage to historic structures (i.e., 0.2 inches PPV or greater) if activities would occur within 25 feet of such resources. No structures within the APE or within ½ mile of the APE were determined to be historic period and thus no structures would be affected.

Archival and Records Searches

A record search was performed in March 2014 at Northwest Information Center, located at Sonoma State University (dated March 19, 2014). The literature review conducted in 2014 revealed that the majority of the GWR Project area had been subject to previous cultural resources survey. Two prehistoric resources (CA-MNT-494 and CA-MNT-2246) were recorded within a ½ mile of the APE. Five historic period resources CA-MNT-1871H, CA-MNT-2079H, CA-MNT-2080H, CA-MNT-2281H, and CA-MNT-2282H, were recorded within a ½ mile of the APE. Seven structures (P-27-3088 – P-27-3094) were recorded within or adjacent to the APE primarily along the Product Water Conveyance alignment (outside the APE). All of the structures have been determined not eligible (6Y) for the National Register of Historic Places (NRHP) on April 27, 2004 (#FHWA040419A).

Within the APE, one previously documented resource has been recorded. CA-MNT-2079H, a historic period fence line, no longer exists within the APE as noted during site surveys (see Enclosures 5 and 6). All known cultural resources within the APE and ½ mile of the APE are described in Enclosure 5 of the attached archaeological assessments. Enclosure 7, Appendix C, in the supplemental report by Pacific Legacy, provides a map of the resources within ½ mile of the APE, and site records for the resources can be found in Enclosure 7, Appendix D.

Field Survey

Archaeological Consulting determined that additional survey was not warranted for previously surveyed portions of the APE due to the lack of changes to the ground surface and physical features of the sites since the date that surveys were conducted (historical aerial photography readily available online was used in addition to local knowledge of the archaeologists). Archaeological Consulting personnel conducted a pedestrian inventory survey of previously unsurveyed areas as reported in the 2015 survey document (see Enclosure 5). No prehistoric or historical sites were encountered within the APE for the GWR Project area. The final archaeological assessment and supplement is included in Enclosures 5 and 6. No additional study or monitoring was completed for the GWR Project area.

Native American Consultation

A search of the Sacred Lands file at the NAHC in March of 2014 indicated that no resources had been listed on the Sacred Lands file maintained by the NAHC are within the APE. The March 2014 request encompassed the GWR Project area. Contact with potential Native American stakeholders was conducted in March of 2014. Contact was via letter, email, and phone. Archaeological Consulting contacted Jakki Kehl, Linda Yamane, Valentin Lopez, Irene Zwierlein, Michelle Zimmer, Ann Marie Sayers, Ramona Garibay, Christianne Arias, and Pauline Martinez-Arias by phone. Two of the respondents suggested cultural resource sensitivity training for construction crew members while two respondents recommended monitoring in proximity to cultural resources and/or sensitive areas. Records of Native American tribal groups or individuals contacted and their responses and results of consultation with Native American groups or individuals are included in Appendix J of the Draft EIR. A phone log of conversations with the Native Americans conducted in 2014 is provided in Enclosure 5, Attachment 3. Consultation with Louise Miranda-Ramirez of the Ohlone/Costanoan-Esselen Nation also occurred in November 2015, including providing her with the updated APE map and site records for recorded sites within ½ mile radius documentation of these communications are included in Enclosure 7, Appendix E.

Effects Determination

Archival and record searches and an archaeological assessment have revealed that no known or previously documented historic properties lie within the APE of the GWR Project area. The State Water Board has reviewed the documentation for the Project and has analyzed the potential for the Project to affect historic properties within the APE. The State Water Board has determined that no known historic properties or sacred sites will be adversely affected by the Project per 36 CFR 800.5(a)(1) for the following reasons:

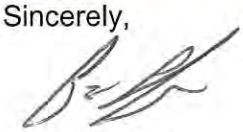
- No known historic properties have been identified within the GWR Project area based on documentation provided by Breschini and Doane (2015a. 2015b).
- No known sacred sites sensitive to potential Native American stakeholders were identified within the GWR Project area through a search of the Sacred Lands Inventory maintained by the NAHC.

- Native American stakeholders contacted in 2014 did not express concerns about specific locales associated with the Project, but rather expressed general concerns relating to ground disturbing activities conducted for the Project. Ongoing communication regarding the Project will be maintained with those stakeholders who have expressed an interest in receiving such information.
- Protocols also have been established to manage the inadvertent discovery of human remains and/or cultural materials as outlined in the Project Mitigation Monitoring and Reporting Program. See Enclosure 8.
- The inadvertent discovery of cultural resources in those areas will be managed according to procedures outlined in the Project's EIR.

All components associated with the Project that were not subject to prior study and that were found to be conducive to surface examination were subject to inventory survey in April 2014. The State Water Board has determined therefore, that no historic properties will be affected by the Project. Pursuant to 36 CFR Part 800, regulations implementing Section 106, we are requesting your concurrence with our determination of "No Historic Properties Affected."

The State Water Board is respectfully requesting your response within 30 days of receiving this consultation request. Please contact Gary Scholze at (916) 341-5642 or at gary.scholze@waterboards.ca.gov if you have any questions or concerns about the Project.

Sincerely,



Gary Scholze
Associate Environmental Planner (Archaeology)
Division of Financial Assistance
State Water Resources Control Board

Enclosures: See next page

Enclosures:

1. Regional Project Location Map
2. Proposed Action Overview Map
3. Resumes for Archaeological Consulting
4. Statement of Qualifications for Pacific Legacy, including resumes for John Holson and Hannah Ballard
5. Cultural Resources Survey for the Proposed Pure Water Monterey Groundwater Replenishment Project, Northern Monterey County (Archaeological Consulting, April 10, 2015)
6. Letter Report, Subject: Monterey Peninsula Groundwater Replenishment Project Minor APE Change, Reclamation Ditch Diversion in Salinas and Blanco Drain Diversion in Marina (Archaeological Consulting, March 3, 2015)
7. Addendum Cultural Resources Inventory for the Pure Water Monterey Groundwater Replenishment Project, Monterey County (Pacific Legacy, November 2015) with the following Appendices:
    - Appendix A: Project Area of Potential Effects Maps
    - Appendix B: Survey Coverage Documentation
    - Appendix C: Cultural Resources within the Study Area and Area of Potential Effects
    - Appendix D: Confidential Resource Records
    - Appendix E: Native American Consultation Documentation
    - Appendix F: SHPO Correspondence for the Regional Urban Recycled Water
8. Project Cultural Resources Mitigation Measures applicable to Proposed Action from the Approved Mitigation Monitoring and Reporting Program (October 2015)
9. Phase 1 Archaeological Reconnaissance for the Marina Coast Water District Regional Urban Water Augmentation Project, Recycled Water Component, in Marina, Ord Community, Seaside and Monterey, Monterey County, California (Archaeological Consulting, Revised May 22, 2007); and Phase 1 Archaeological Reconnaissance for Two Additional Alignments for the Marina Coast Water District Regional Urban Water Augmentation Project, Recycled Water Component, in Marina, Monterey County, California (Archaeological Consulting, September 4, 2007)

Cc: See next page

Cc: without enclosures:

Mr. Josh Amaris M.B.A., M.S.
US EPA Region 9
Water Infrastructure Office
75 Hawthorne Street
San Francisco, CA 94105

Mr. Mike McCullough
External Governmental Affairs Coordinator
Monterey Regional Water Pollution Control Agency
5 Harris Court, Building G
Monterey, CA 93940

U.S. Army Corps of Engineers
ATTN: Janelle Leeson, Regulatory Project Manager
1455 Market Street, 16th Floor
San Francisco, CA 94103

CERTIFIED MAIL NO.: 7015 – 3010 – 0002 – 3570 - 7476
RETURN RECEIPT REQUESTED

Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, DC 20001-2637

Enclosure 1.

Regional Project Location Map

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Cal-Am Service Area
Seaside Basin (Approximate Area)
Castroville Seawater Intrusion Project
Pure Water Monterey Groundwater Replenishment Project Area
MRWPCA Regional Wastewater Treatment Plant (Existing)
Monterey Bay
Saratoga
Los Gatos
Coyote
New Almaden
Morgan Hill
San Martin
Gilroy
Brookdale
Ben Lomond
Mount Hermon
Soquel
Capitola
Freedom
Pajaro
Aromas
San Juan Bautista
Hollister
Tres Pinos
Castroville
Salinas
Spreckels
Chualar
Gonzales
Soledad
Monterey
Pebble Beach
Carmel-by-the-Sea
Seaside
Carmel Valley
Andrew Molera State Park
Santa Clara County
Santa Cruz County
San Benito County
Monterey County
San Mateo County
SANTA CRUZ MOUNTAINS
SIERRA DE SALINAS
GABILAN RANGE
MONTEREY
SAN BENITO
Carson City
Sacramento
NEVADA
San Francisco
Fresno
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Enclosure 2.

Proposed Action Overview Map

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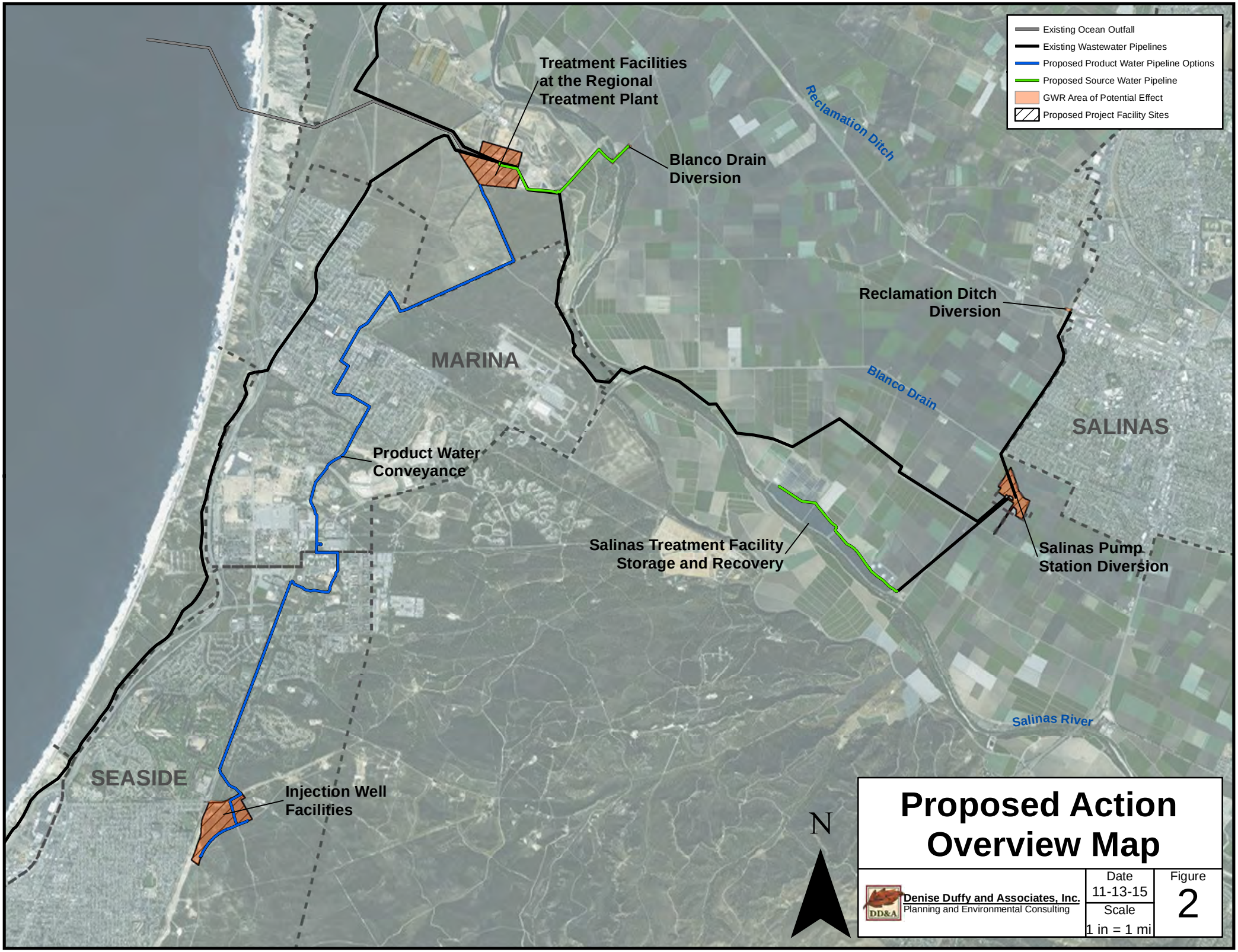

Proposed Action Overview Map

Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

Date 11-13-15

Scale 1 in = 1 mi

Figure 2

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Enclosure 3.

Resumes for Archaeological Consulting

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GARY S. BRESCHINI, PH.D.

ARCHAEOLOGIST

Education

Ph.D. Washington State University, 1983 (Anthropology)

M.A. Washington State University, 1975 (Anthropology)

B.A. University of California, Santa Barbara, 1971 (English)

Professional Experience

Dr. Breschini is field director or principal investigator for over 4,500 archaeological reconnaissance, excavation, evaluation, overview, mitigation, and research projects. With extensive experience in archaeology, cultural resource management, rock art documentation, and human osteology in Central and Northern California, Dr. Breschini has been published and continues to publish in journals pertinent to his profession, and has written the text for the archaeology sections of environmental documents (NEPA and CEQA) since 1975.

Professional Certifications

- Accredited expertise in Archaeological Field Research (Society of Professional Archaeologists)
- Accepted for inclusion in the Directory of California Archaeological Consultants (Society for California Archaeology - 1979)
- Life Credentials in Anthropology, Board of Governors, California Community Colleges, 1975

Professional Memberships

- American Association of Physical Anthropologists
- Society for American Archaeology
- Society for California Archaeology
- Society of Professional Archaeologists

Teaching Experience

- Washington State University
- Hartnell Community College
- Cabrillo Community College
- Monterey Peninsula College

Brief Resume of Mary Doane

Education:

Attended University of California, Berkeley, Cabrillo College, Aptos and San Jose State College, San Jose (1963-1969). Received a B.A. with honors, from San Jose State College (1969)

Graduate work, History of Consciousness Program, University of California, Santa Cruz (1969-1970). Left program without advanced degree.

Returned to Cabrillo College for technical courses including Archaeology Field Survey, Excavation, Laboratory Procedures and Special Studies, including Mission Period Glass Trade Bead Analysis (1982-1986).

Archaeological Experience:

1987-1991: Archaeological Specialist (Seasonal) with the State of California, Department of Parks and Recreation. Assigned to Wilder Ranch State Park (1987-1989) and the Monterey Regional Office (1989-1991). Performed excavations and lab work at Wilder Ranch under direction of Lee Motz, State Archaeologist. Worked as Field Lab director for Cabrillo College Summer Excavation at Wilder Ranch (1988) for Rob Edwards. Performed archaeological monitoring and reconnaissance in many park units throughout the Monterey Region, San Francisco Bay area to Santa Barbara Channel Coast under direction of Herb Dallas, Regional Archaeologist. Performed technical lab work, cleaning, sorting, identification, etc. at Wilder Ranch and in the Regional Office.

1991-present: Senior field archaeologist and project manager with Archaeological Consulting, Salinas. Began as a field crewmember and lab technician. Assumed additional responsibilities as lab supervisor (1996) and field/office supervisor and project manager (1998). Perform all aspects of laboratory processing, including cleaning, sorting, identification, cataloguing and archiving. Perform fieldwork, including excavation, reconnaissance and monitoring under the direction of the principals of the company, Gary S. Breschini, Ph.D. and Trudy Haversat, M.A. Complete field and lab documents, site records, and co-author reports on reconnaissance, monitoring, mitigation, and excavation.

During 1990's: Additional field experience as field crewmember for excavations at Wilder Ranch State Park (Biosystems Analysis) and Buena Vista Adobe (Roberta Greenwood Associates).

Archaeological Resume

Patrick H. Cave
c/o Archaeological Consulting
P.O. Box 3377
Salinas, CA 93912
(831) 422-4912 office

Education:

Attended Cabrillo College, Aptos (1988-1995). Majored in Cultural Anthropology with an emphasis in Archaeology.

Attended University of California, Santa Cruz (1995-1997). Major in Anthropology.

Archaeological Employment Experience:

1989-1996 Board member, Santa Cruz Archaeological Society. Was Survey Liason to the County of Santa Cruz. Performed reconnaissance for CEQA compliance.

1990-1993 Volunteer excavator at Mission Santa Cruz under supervision of Karen Hildebrandt, State Parks and Recreation archaeologist.

1992-1997 Field and lab archaeological technician with Archaeological Consulting, Salinas. Performed routine field and lab work, including excavation, reconnaissance and monitoring under the direction of the principals of the company, Gary S. Breschini, Ph.D. and Trudy Haversat, M.A. Experienced with burial recovery and all aspects of excavation and monitoring/data recovery.

1995 Archaeological technician/excavator for Holman and Associates, San Francisco. Excavated units and performed burial recovery.

1993-1995 Worked for Archaeological Resource Management, R. Cartier, Ph.D. principal, as a field technician and laboratory assistant. Monitored sites, surveyed, auger tested and made impact determinations, produced maps, performed excavation and screening.

1994 Teaching assistant/crew leader for Rob Edwards, Cabrillo College Archaeological Program. Demonstrated survey and excavation techniques.

1997-2003 Worked as field crew and lab technician for Archaeo-tec, Alan G. Pastron, Ph.D. president. Performed field investigations, monitoring and data recovery, laboratory analysis and report preparation.

2003-2011 Returned to work with Archaeological Consulting, Salinas. Works as field crew leader, performing all aspects of test excavation, survey and monitoring/data recovery as required. Handles most long-term monitoring projects, observes construction, documents graphically and photographically, recovers physical data for lab processing. Performs all aspects of laboratory processing.

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Enclosure 4.

Resumes for John Holson and Hannah Ballard

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John J. Holson

Principal Investigator/Project Manager

Email: holson@pacificlegacy.com

Summary of Qualifications	Mr. Holson has been a professional archaeologist since 1974 and has over 32 years experience in cultural resources management in the United States and abroad. In the United States he has worked on projects in California, Nevada, Arizona, Hawaii and Oregon. Overseas he has worked in Mexico, England, Scotland, and Serbia. He has managed his own cultural resources consulting firm (1985-1990), was an Associate Environmental Planner with the California Department of Transportation (1987-1990) and Cultural Resources Division Program Manager (1990-1994) for BioSystems Analysis, Inc. In an academic setting he was staff archaeologist for the Anthropology Laboratory, Sonoma State University and was a visiting professor at the Department of Anthropology, University of California, Berkeley in 1996 and College of Marin, Kentfield (1998-2003). Mr. Holson's areas of experience include: - Cultural Resources project scoping and management - Compliance with Federal State historic preservation laws - Agency consultation and Native American coordination - Research Designs for historic and prehistoric archaeology - Principal Investigator for surveys, test and data recovery excavations - Development of Historic Property Treatment Plans - Preparation of cultural resource sections of CEQA and NEPA environmental documents He is currently a principal and owner of Pacific Legacy. He has managed and participated as Principal Investigator in projects ranging from small scale reconnaissance efforts to multi-task indefinite delivery order type contracts. He directed all aspects of cultural resources management projects for such agencies as the United States Forest Service, National Park Service, U.S. Army Corps of Engineers, U.S. Army and Navy, California Department of Transportation, Oregon Department of Energy, and utilities such as Pacific Gas and Electric Company and Southern California Edition Company. He currently is manager of the Berkeley Office of Pacific Legacy and Program Manager for the current U.S. Bureau of Reclamation IDIQ held by Pacific Legacy as a subcontractor to several consulting firms.
Education	M.A., Cultural Resources Management, Sonoma State University, California, 1990 B.A., Anthropology (Major), Humanities (Minor), San Francisco State University, California, 1976
Recent Key Projects	2005-2015 Project Manager. *U.S. Bureau of Reclamation Environmental On-call*. Mr. Holson managed several cultural resource studies for various water projects in throughout California. We have completed at least 15 projects under this IDIQ and three others are in various stages of completion. Tasks included NEPA documentation, Class II archaeological surveys, Historic Properties Treatment Plans, NRHP evaluations, Agreement Documents, and Native American contact. Mr. Holson recently managed the San Joaquin Restoration Reach 4B and the San Luis Low Point cultural resource studies under this contract. 2009-2014 Co-Principal Investigator. Tehachapi Renewal Transmission Line Project (TRTP), Southern California Edison Company. Assisted in management of the TRTP project which included survey, preparation of research designs and historic contexts, evaluation reports, and data recovery reports. Managed production unit which produced over 100 documents for agency review. 2008-2011 Principal Investigator. CAL-AM Water. Project components include a review of the proponents PEA, survey of an additional water pipeline, record search for a proposed regional approach, and writing sections of EIR/EIS for the CPUC. He also peer reviewed client documents prepared for submittal to the U.S. Bureau of

		Reclamation.
	1999-2008	Managed on-call contract with Bob Booher consulting for oil and gas exploration throughout California. Pacific Legacy has conducted over 54 tasks related to cultural resources on this on-call in Sacramento, Yolo, Solano, Contra Costa and Merced Counties. The size of the projects range from single well pads less than an acre in size to large projects over 3000 acres. The majority of the work was conducted under the auspices of Section 106 of the National Historic Preservation Act due to Section 404 federal permitting by the Army Corps of Engineers.
	2006	Principal Investigator for the Monitoring and Test excavations at CA-SJO-19/H for the South Quierolo Project, Lathrop. During trenching adjacent to the San Joaquin River for a pipeline project, 21 burials were unearthed. Pacific Legacy was responsible for burial removal and subsequent pipeline construction monitoring. As a separate project, Pacific Legacy conducted test excavations at the site to aid the developer in avoiding the site during housing construction.
	2004-2012	Project Manager. *City of St. Helena Flood Control Project.* Survey, evaluation, data recovery, Native American consultation, and preparation of Programmatic Agreement for nine sites affected by flood control project.
	1997-2005	Intensive cultural resources survey of 50 miles of proposed pipeline for the *Pajaro Valley Water Management Agency* in Santa Clara, San Luis Obispo, Monterey and Santa Cruz Counties. Responsible for site documentation, existing conditions and impact/mitigation for the EIREIS. Conducted NRHP evaluations at several sites. U.S. Bureau of Reclamation oversight on distribution portion of the pipeline.
	2005-2015	Project Manager. *Presidio Trust On-call.* Tasks have included construction monitoring, write-up of previously excavated materials, data recovery on the former military base of the Presidio in San Francisco. Periods investigated include, Spanish, Mexican, and American military occupation of the Presidio.
	2001-2015	Principal Investigator. *City of Monterey On-call* contract since 2001 for cultural resources consulting services. We have completed over 40 task orders including site surveys, Phase 1 evaluations, burial removal, construction monitoring and completion of historic preservation documents such as Memorandum of Agreements, Historic Properties Treatment Plans and Inadvertent Discovery Plans.
	1995-2007	Principal Investigator. Evaluation studies for 80 miles of pipeline around Clear Lake in Lake County. Tasks included Phase II evaluations, Data Recovery, construction monitoring, negotiating agreements with three different Native American groups, preparation of several Programmatic Agreements and supporting Section 106 documentation.
Selected Publications & Accomplishments	Author, co-author, editor, or contributor to two hundred (200) cultural resource management reports including archaeological survey, testing and evaluation, data recovery and research design reports, three (3) international archaeological reports, fifteen (15) cultural resource management plans, and five (5) memorandum of agreements/programmatic agreements. Contributor to over forty (40) EIS/EIR's and twenty (20) professional presentations. Member of Register of Professional Archaeologists (ROPA) and participated in Polaris Oil Tanker Spill Drill in San Francisco Bay as cultural resource specialist (2011).	

E-mail : ballard@pacificlegacy.com

Hannah S. Ballard

Project Manager/Senior Supervisor (History/Historical Archaeology)

Summary of Qualifications	Ms Ballard is a Senior Archaeologist specializing in Historical Archaeology. In 2003, she received her M.A. in Cultural Resources Management from Sonoma State University. In 1995, she received her B.A. from the University of California, Berkeley and graduated with Highest Honors in Anthropology and High Distinction in general scholarship. Ms. Ballard has over 17 years experience in Cultural Resources Management and 20 years experience in archaeology in California and Hawai`i. Ms. Ballard has worked on numerous projects in Northern, Central, and Southern California and Hawai`i. These projects include small and large surveys, record and information searches, historical context research and writing, cultural landscape analysis, excavation at the testing and data recovery levels, and prehistoric and historical site recording, excavation, and evaluation. She has served in a supervisory capacity for over ten years. In her role as a supervisor, she has directed surveys and excavations, and trained new archaeologists in field methods, lab methods, research, and report writing. Hannah Ballard has expertise in the following areas: • Supervision of cultural resource investigations including survey, recording, monitoring, test excavation, and data recovery of prehistoric and historical archaeological sites; • Historical research; • Technical report writing and production; • NEPA, NHPA, CEQA, NAGPRA regulatory compliance; • Graphic production; and • Quality control of fieldwork and documentation
Education	M.A., Cultural Resources Management, Sonoma State University, 2003 Thesis Title: *The Hite's Cove Cultural Landscape: Where Community, Mode Of Production, And Place Intersect*. M.A., Sonoma State University, Rohnert Park, California. B.A., Anthropology, University of California, Berkeley, 1995 Senior Honor's Thesis Title: *Searching for Metini: Synthesis and Analysis of Unreported Archaeological Collections from Fort Ross State Historic Park, California.*
Recent Key Projects	2014-2015 Senior Historical Archaeologist. *San Luis Transmission Line Project (PG&E), San Joaquin Valley.* Class III report for 85 miles of transmission line in Contra Costa, San Joaquin, and Merced Counties. Contributed to the archaeological research design and completed NRHP evaluations of historic period cultural resources. Produced addendum Class III inventory report for the Billy Wright Corridor. 2012-2015 Project Manager, Senior Historical Archaeologist, *City and County of San Francisco As-Needed Consultant Services for Historic Resources and Archaeological Review.* Directed numerous projects for private developers within the City of San Francisco. Tasks included completion of testing and monitoring plans, executing testing, data recovery excavations, archaeological monitoring and reporting to comply with City of San Francisco requirements under CEQA. Projects included 400 Grove, 401 Grove, Turk and Leavenworth, Boys and Girls Club, 1201 Tennessee, 388 Fulton and 800 Presidio Projects. 2010-2015 Project Manager, Senior Historical Archaeologist, *San Francisco Presidio Trust On-Call*. Managed archaeological monitoring of construction, archaeological testing and historical research for numerous projects at the Presidio of San Francisco. Projects include: Main Parade Ground Greening, Montgomery Street Barracks Landscaping, Presidio Main Post Archival Research, Taylor Road Reconstruction, the Archaeology Education Center. John Holson, Principal Investigator. 2011-2015 Senior Archaeologist. *Laguna Creek Trail North and South Camden Spur Projects, City of Elk Grove and Caltrans.* Several iterations of the Caltrans local assistance project for the construction of segments of the Laguna Creek Trail in the City of Elk Grove, Sacramento County. Managed cultural resources inventory survey of Laguna Creek Trail, Laguna Creek Trail North and South Camden Spur Projects, work included record search, Native American Consultation, pedestrian survey and

E-mail : ballard@pacificlegacy.com

Hannah S. Ballard

Project Manager/Senior Supervisor (History/Historical Archaeology)

	Archaeological Survey Report and Historic Property Survey Report for CEQA and Section 106 of the NHPA compliance. 2010-2014 Senior Historical Archaeologist and Project Supervisor. *North Area Sites Evaluation Project, Western Area Power Authority.* Contributed to the Historic Context and Research Design for cultural resources located within over 700 miles of transmissions lines in northern California. Managed and conducted archival research and NRHP evaluation of approximately 110 historic period archaeological sites located along Western Area Power facilities throughout northern California. Rob Jackson, Principal Investigator. 2011-2012 Project Supervisor and Senior Historical Archaeologist. Santa Cruz Mountains CAPP, Jodie McGraw Consultants. Managed cultural resources component of a Conservation Area Protection Plan for 224,000 acre region in the Santa Cruz Mountains. Tasked by Sempervirens Fund to conducting research on existing prehistoric and historic period cultural resources, predicted locations of unidentified cultural resources and complete a conservation valuation analysis of resources in the plan area. Tom Jackson, Principal Investigator 2008 Senior Archaeologist and Director. Phase II investigations of historic period components of hard rock and placer gold mining and Prison labor camp sites (CA-SHA-4169/H, CA-SHA-171H, and CA-SHA-4172/H) including mining and residential features for the Buckhorn Grade Improvement Project, California Department of Transportation. Pacific Legacy, Inc. Robert Jackson, Principal Investigator. 2004 Field Director. Archaeological Test Excavations Boronda Adobe, Monterey. Trish Fernandez, Principal Investigator. 2004 Field Director. Phase II Investigations at CA-MEN-2645/H, CA-MEN -3037H, And CA-MEN-3190H On State Route 101, Mendocino County**.** Department of Transportation, District 3, Marysville, California. Pacific Legacy, Inc., Robert Jackson, Principal Investigator
Professional Experience	1995-Present Senior Archaeologist. Pacific Legacy Inc. Promoted from Technician, Crew Chief, and Supervisor to current position. Direct small and medium size crews in survey and excavation. Author and contribute to excavation and survey reports. Supervise staff in report preparation. Coordinate with clients, subcontractors, and specialists. Member of the Pacific Legacy Board of Directors (2002-2005)
Selected Publications & Accomplishments	Ballard, Hannah 1997 Ethnicity and Chronology at Metini, Fort Ross State Historic Park, California . In The Archaeology of Russian Colonialism in the North and Tropical Pacific, edited by Peter Mills and Antoinette Martinez. *Kroeber Anthropological Society Journal, 81:116-140*, Berkeley, California. Bartoy, Kevin, John Holson and Hannah Ballard 2006 "Ponying Up to Billy Hurst's Saloon": Testing and Evaluation of Nineteenth and Twentieth Century Archaeological Deposits Through Less Invasive Techniques, Yosemite National Park, California. In *Between Dirt and Discussion: Methods, Methodology and Interpretation in Historical Archaeology.* Steven N. Archer and Kevin M. Bartoy eds. Pp. 201-224. Springer Science and Business Media, New York.
Additional Publications	Authored, co-authored, and contributed to professional presentations and over 50 small and large reports including historical documentation, evaluations for eligibility for the National Register of Historic Places and the California Register of Historic Resources, survey, testing, data recovery.
Professional Affiliations & Memberships	Society for Historical Archaeology, Society for California Archaeology, Society for American Archaeology

Enclosure 5.

Cultural Resources Survey for the Proposed Pure Water Monterey Groundwater Replenishment Project, Northern Monterey County (Archaeological Consulting, April 10, 2015)

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This report is not included in the electronic transfer to the FAAST system based on direction of Ahmad Kashkoli, SWRCB - Division of Financial Assistance because the report contains confidential information. Specifically, information regarding the location, character, or ownership of a historic resource is exempt from the Freedom of Information Act.
Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites, which should not be disclosed to unauthorized persons. Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C. 470w-3 (National Historic Preservation Act) and 16 U.S.C. § 470hh (Archaeological Resources Protection Act). In addition, access to such information is restricted by law, pursuant to Section 6254.10 of the California State Government Code.

Enclosure 6.

Letter Report, Subject: Monterey Peninsula Groundwater Replenishment Project Minor APE Change, Reclamation Ditch Diversion in Salinas and Blanco Drain Diversion in Marina (Archaeological Consulting, March 3, 2015)

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ARCHAEOLOGICAL CONSULTING

P.O. BOX 3377
SALINAS, CA 93912
(831) 422-4912
Fax (831) 422-4913

March 3, 2015

AC project 4642B

Alison Imamura
Denise Duffy & Associates
947 Cass St., Suite 5
Monterey, CA 93940

Re: Monterey Peninsula Groundwater Replenishment Project minor APE change, Reclamation Ditch Diversion in Salinas and Blanco Drain Diversion in Marina

Dear Mrs. Imamura:

At your request we have reviewed our records to determine whether our findings and recommendations would require any change based on the minor changes in location for the Reclamation Ditch Diversion in Salinas and the Blanco Drain Diversion Alternatives in Marina, Monterey County, California (see Maps 1-3). The UTMG coordinates for the approximate centers of each of these areas are as follows: Reclamation Ditch Diversion 6.1851/40.6070 on the USGS 7.5 Minute Salinas Quadrangle (1947, photo-revised 1984) and Blanco Drain Diversion on the USGS 7.5 Minute Marina Quadrangle (1947, photo-revised 1983).

We found that the new Reclamation Ditch Diversion area west of Davis Road in Salinas was included in a previous reconnaissance (Bourdeau 1985), which found nothing in that specific portion of the study area. The new APE lies within or immediately adjacent to areas surveyed in three other projects completed by Archaeological Consulting (Breschini and Haversat 1979; Doane 2000; Doane and Breschini 2012).

The Blanco Drain Diversion Alternatives alignments were included in our original research radius for the current project. Because of the extensive previous earthwork in the area of the proposed Blanco Drain Diversion Alternatives alignments, the lack of recorded resources in that area, and the location of pipelines in parallel alignments throughout the area, we have concluded that there is no necessity for additional field study of the area. Several previous archaeological studies have been completed in the near vicinity of the alternative alignments with negative results (Peak and Associates 1978; Doane and Haversat 2006; Jones and Holson 2009; Doane and Breschini 2013).

Based on our previous research and field findings, the project in these areas is expected to have no effect on significant historic resources.

Nevertheless, because the possibility exists that unidentified (buried) cultural resources may be discovered during any underground construction, we recommend that the following standard language, or the equivalent, be included in any permits issued for the project area:

- If archaeological resources are unexpectedly discovered during construction, work shall be halted within 50 meters (±160 feet) of the find until it is evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated, with the concurrence of the lead agency, and implemented.

If you should have any further questions or concerns in this matter, please do not hesitate to contact us.

Sincerely,

Gary S. Breschini, Ph.D., RPA
GSB/mkd

REFERENCES

Bourdeau, L.

1974 *Preliminary Report on Archaeological Reconnaissance and Evaluation with Recommendations for Cultural Resource Management, South Boronda Reorganization Area, Northwest of Salinas, Monterey County California.* Report on file at the Northwest Information Center, Sonoma State University.

Breschini, G. S. and T. Haversat

1979 *Preliminary Archaeological Surface Reconnaissance of the Davis Road Grade Separation Project, West of Salinas, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

Doane, M.

2000 *Negative Archaeological Survey Report for the Encroachment Permit Application for the Proposed Sanitary Sewer Trunkline Crossing of State Highway 183 at Davis Road in Salinas, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

Doane, M. and G. S. Breschini

2005 *Phase 1 Archaeological Survey Report for the Davis Road Class II Bicycle Lane Project, in Salinas, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

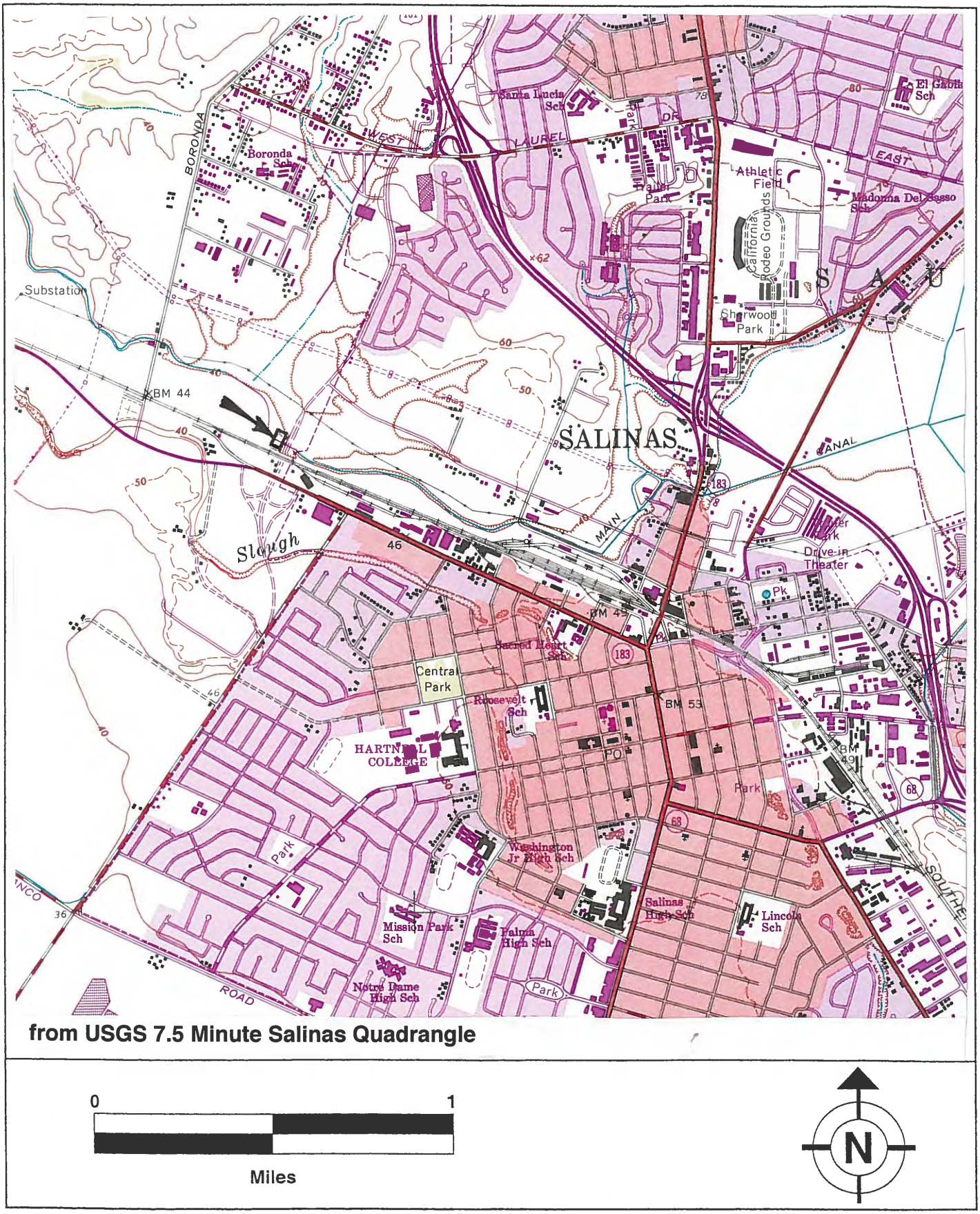
2013 *Preliminary Archaeological Reconnaissance for the MRWPCA Salinas Pump Station Capacity Enhancement Project between Salinas and Marina, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

Doane, M. and T. Haversat

2006 *Phase 1 Archaeological Reconnaissance for the Marina Coast Water District Regional Urban Water Augmentation Project, Recycled Water Component, Northern Segment, in Marina and Seaside, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

Jones, K. and J. Holson
2009 *Archaeological Survey for the Cal-Am Coastal Water Project, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.

Peak, A. and Associates
1978 *Cultural Resource Assessment of the Proposed Effluent Disposal System, Fort Ord, Monterey County, California.* Report on file at the Northwest Information Center, Sonoma State University.



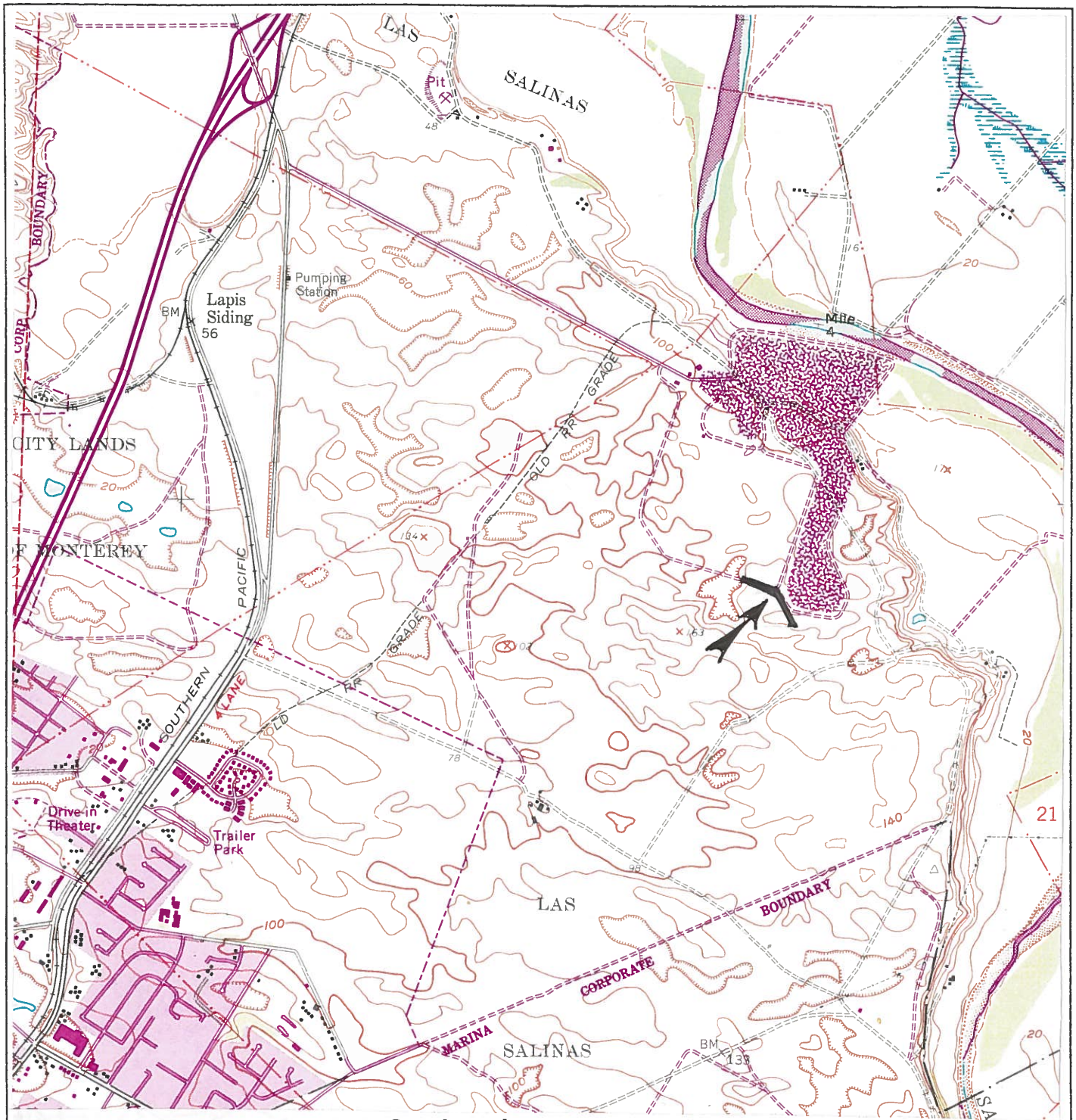
from USGS 7.5 Minute Salinas Quadrangle

0 1

Miles

N

Map 1. Project Location.



from USGS 7.5 Minute Marina Quadrangle

0 1

Miles

N

Map 2. Project Location

Map 3. Project APE Reclamation Ditch Diversion

DD&A

Blanco Drain Diversion Conceptual Site Plan - Western Portion

October 2014

Pure Water Monterey GWR Project
Administrative Draft EIR

Figure 2-25b

Map 4. Project APE Blanco Drain Diversion Alternatives

Enclosure 7.

Addendum Cultural Resources Inventory for the Pure Water Monterey Groundwater Replenishment Project, Monterey County (Pacific Legacy, November 2015)

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This report is not included in the electronic transfer to the FAAST system based on direction of Ahmad Kashkoli, SWRCB - Division of Financial Assistance because the report contains confidential information. Specifically, information regarding the location, character, or ownership of a historic resource is exempt from the Freedom of Information Act.
Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites, which should not be disclosed to unauthorized persons. Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C. 470w-3 (National Historic Preservation Act) and 16 U.S.C. § 470hh (Archaeological Resources Protection Act). In addition, access to such information is restricted by law, pursuant to Section 6254.10 of the California State Government Code.

Enclosure 8.

Project Cultural Resources Mitigation Measures applicable to Proposed Action from the Approved Mitigation Monitoring and Reporting Program (October 2015)

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Enclosure 8: Mitigation Measures for Cultural Resources – Proposed Action for the SWRCB Clean Water State Revolving Fund Application

Impact	Mitigation	Applicable Components	Timing of Implementation	Implementation Responsibility	Timing of Monitoring	Responsibility for Compliance Monitoring[1]
Impact CR-2: Construction Impacts on Unknown Archaeological Resources or Human Remains	**Mitigation Measure CR-2b**: **Discovery of Archaeological Resources or Human Remains.** If archaeological resources or human remains are unexpectedly discovered during any construction, work shall be halted within 50 meters (±160 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented. The County Coroner shall be notified in accordance with provisions of Public Resources Code 5097.98-99 in the event human remains are found and the Native American Heritage Commission shall be notified in accordance with the provisions of Public Resources Code section 5097 if the remains are determined to be of Native American origin.	All components	During project construction	MRWPCA, m, and qualified archaeologists	During project construction	MRWPCA, and qualified archaeologist
	Mitigation Measure CR-2c: **Native American Notification.** Because of their continuing interest in potential discoveries during construction, all listed Native American Contacts shall be notified of any and all discoveries of archaeological resources in the project area.	All components	During project construction	MRWCPA, and qualified archaeologist	During project construction	MRWCPA and qualified archaeologist

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OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

April 19, 2016

Reply to: EPA_2016_0304_001

Gary Scholze, Archaeologist
Division of Financial Assistance
State Water Resources Control Board
P. O. Box 100
Sacramento, California 95812-0100

RE: Request for Concurrence on Section 106 Compliance and a Finding of No Historic Properties Affected for the Pure Water Monterey Groundwater Replenishment Project; Monterey County, California; Clean Water State Revolving Fund (CWSRF) Project No. C-06-8028-110 (your letter of January 28, 2016)

Dear Mr. Scholze:

Thank you for requesting my comments on the above cited undertaking, in accordance with Section 106 of the *National Historic Preservation Act*, as amended. The Environmental Protection Agency (EPA) has delegated lead agency responsibility to the State Water Resources Control Board (Board) for carrying out the requirements of Section 106.

The Monterey Regional Water Pollution Control Agency (Agency) proposes to implement and construct the Pure Water Monterey Groundwater Replenishment Project (Project). Specifically, the proposed undertaking consists of the elements and actions that you have described in detail in Table 1 (Construction Area of Disturbance and Permanent Footprint) which is included in your letter. The area of potential effect (APE) encompasses the elements and actions described in Table 1, which are located in seven separate areas. Access to the APE will be via paved roads.

As documentation for your finding of effect, you provided a cultural resources survey report, which was prepared by Mary Doane and Dr. Gary S. Breschini (Archaeological Consulting, Salinas, CA), dated December 22, 2014 and revised April 10, 2015. On March 19, 2014, a records review was conducted at the Northwest Information Center at Sonoma State University, which identified: (1) two cultural resources (CA-MNT-494 and CA-MNT-2079H) as being located with the APE, and (2) that 95 previous cultural resource surveys had been conducted on portions of the APE or within a half-mile of the APE between 1974 and 2013. Consequently, those portions of the APE that had been surveyed previously were not resurveyed by Archaeological Consulting. However, they did conducted pedestrian surveys of the unsurvey portions of the APE on April 3 and 21, 2014 and in March 2015 with negative results.

CA-MNT-494 was recorded as a midden containing several burials (i.e., probably four burials) in 1973. Unfortunately, the site was discovered during the construction of an aeration lagoon that was constructed in 1972 as part of the Salinas Industrial Wastewater Treatment Facility. The site form described the condition of the site as “completely excavated by tractors and destroyed”. CA-MNT-2079H was recorded in 1998 as a portion of a wooden fence that was described as “being in a state of disrepair”. Both sites were resurveyed during the pedestrian survey, which was unable to relocate CA-MNT-494 and found that CA-MNT-2079H was rapidly deteriorating and several sections of the fence had fallen down.

Native American consultation included contacting the American Heritage Commission (NAHC) twice (on March 6, 2014 and December 24, 2014) and requested a record search of their sacred land file. The NAHC responded that their search did not indicate the presence of Native American cultural resources in the APE. On March 6, 2014, request for comment letters were sent to the 12 Native American contacts provided by NAHC, with subsequent telephone calls made to them in May of 2015. Two of the representatives suggested cultural resource sensitivity training for the construction crew members and two other representatives recommended that monitoring be conducted in proximity to cultural resources and/or sensitive areas. In the Agency's Final Environmental Impact Report for the project are the following two mitigation measures:

Mitigation Measure CR-2b – Discovery of Archaeological Resources or Human Remains

If archaeological resources or human remains are discovered, all work will cease within 160 feet of the find until it can be evaluated by a qualified archaeologist. The Agency and a qualified archaeologist are responsible for the compliance monitoring

Mitigation Measure CR-2c – Native American Notification

Because of their continuing interest in potential discoveries during construction, all listed Native American contacts shall be notified of any and all discoveries of archaeological resources in the project area.

Based on the records review, the cultural resource surveys, and the tribal consultation, the Board has concluded a Finding of No Historic Properties Affected is appropriate for this proposed undertaking and has requested my concurrence with that finding. The Agency will conduct the project in accordance with the mitigation measures described above. The Board has requested me to review and comment on their identification of the APE and their determination of No Historic Properties Affected for the project.

After reviewing the information submitted with your letter, I offer the following comments:

- I have no objections to your identification and delineation of the APE, pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d);
- I agree with the Agency's decision to conduct the proposed undertaking in accordance with the mitigation measures described above; and
- I do not object to your determination of No Historic Properties Affected for the proposed undertaking, as described above.

Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have additional future responsibilities for this undertaking under 36 CFR Part 800. Should you encounter cultural artifacts during ground disturbing activities, please halt all work until a qualified archaeologist can be consulted on the nature and significance of such artifacts.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact the following member of my staff: Tristan Tozer at (916) 445-7027 or via e-mail at Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

CALIFORNIA
Water Boards

State Water Resources Control Board

Edmund G. Brown Jr.
GOVERNOR

Matthew Rodriquez
SECRETARY FOR

CERTIFIED MAIL NO.: 7003 – 0500 – 0003 – 1326 - 9645
RETURN RECEIPT REQUESTED

FEB 12 2018

Ms. Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

CONTINUING NATIONAL HISTORIC PRESERVATION ACT (NHPA) SECTION 106 CONSULTATION FOR THE PURE WATER MONTEREY (APPLICANT) GROUNDWATER REPLENISHMENT PROJECT (UNDERTAKING), MONTEREY COUNTY, CALIFORNIA; CLEAN WATER STATE REVOLVING FUND (CWSRF) NO. C-06-8028-110, SHPO TRACKING NO. EPA_2016_0304_001

Dear Ms. Polanco:

The State Water Resources Control Board's (State Water Board) Division of Financial Assistance (DFA) is continuing consultation under Title 54 United States Code (USC) § 306108, commonly known as Section 106 of the NHPA, and its implementing regulations found at 36 Code of Federal Regulations (CFR) Part 800, for the subject Undertaking located just west of the City of Salinas in Monterey County, California.

DFA administers the CWSRF Program pursuant to 40 CFR Part 35. The Applicant is seeking funds from this program to assist in financing the Project. The CWSRF Program is partially funded by a capitalization grant from the United States Environmental Protection Agency (USEPA). Issuance of CWSRF funds by the State Water Board is considered equivalent to a federal undertaking, thereby necessitating compliance with Section 106 under a Nationwide Programmatic Agreement executed for the CWSRF by USEPA, the Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers. USEPA has delegated lead agency responsibility to the State Water Board for carrying out the requirements of Section 106.

In a letter dated April 19, 2016, the State Historic Preservation Officer concurred (Enclosure 1) on the Area of Potential Effects (APE) and a finding of no adverse effect for the Undertaking as described (Enclosure 2). The Reclamation Ditch Diversion portion of the APE has changed from what was originally concurred upon in 2016.

New APE for the Reclamation Ditch Diversion
Enclosure 3 depicts the original Reclamation Ditch Diversion APE and Excavation Site Plan (permanent facility footprint) in relation to the new Reclamation Ditch Diversion APE. The enlargement of the horizontal APE for the permanent facility is due to the addition of matting along the banks of the diversion structure. The vertical APE of the permeant facility is the same. The horizontal APE of the construction footprint was enlarged to allow for a larger staging area and to include the access roads.

Cultural Resources Inventory and New APE
The Applicant contracted with Archaeological Consulting and later Pacific Legacy Inc. to do a historic properties identification report (Doane and Breschini 2015) and an Addendum report (Pacific Legacy 2015). As part of the study, a records search was conducted at the Northwest Information Center (NWIC), with a half mile buffer around the APE. The results of this search indicated that seven previous cultural resource investigations were completed covering almost all portions of the new APE with the exception of the southeast access road (Enclosure 4). No cultural resources are recorded within the new APE and one prehistoric site with burials (CA-MNT-2246) was recorded approximately 800 feet to the south of the new APE on the south side of State Route 183 (Enclosure 4).

Description of Findings
The new Reclamation Ditch Diversion APE has been previously surveyed for cultural resources with the exception of the southeast access road (Enclosure 3). The southeast access road runs along the top of a graveled berm that is most likely composed of spoils from excavation and maintenance of the canal adjacent to it (Enclosure 5). Because the southeast road is on top of a graveled berm, impacts from vehicle traffic should not affect native soil.

State Water Board Finding of Effect
The State Water Board has reached a finding that historic properties will not be affected by the APE change. Therefore, the State Water Board is seeking concurrence that the finding of "no historic properties affected" pursuant to 36 CFR Part 800.4(d)(1) is still applicable.

The State Water Board is respectfully requesting your response within 30 days of receiving this consultation request. Please contact Wendy Pierce at 916-449-5178 or at Wendy.Pierce@waterboards.ca.gov if you have any questions or concerns about the undertaking.

Sincerely,

Wendy Pierce
Senior Environmental Planner
Division of Financial Assistance

Enclosures: See next page

Enclosures (5):

1. Letter from SHPO, dated April 19, 2016
2. Letter to SHPO with APE table, dated March 3, 2016
3. Figure 1 Old and New APEs on Aerial Background
4. Figure 2 Old and New APEs on Record Search Results Map
5. Google Earth Street Views of Southeast Road to west and east

cc: without enclosures:

Elizabeth Borowiec
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US EPA Region 9
Water Infrastructure Office
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State of California • Natural Resources Agency Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION Lisa Ann L. Mangat, *Director*
OFFICE OF HISTORIC PRESERVATION

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Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

February 28, 2018

Reply to: EPA_2016_0304_001

Wendy Pierce, Senior Environmental Planner
Division of Financial Assistance
State Water Resources Control Board
P. O. Box 100
Sacramento, California 95812-0100

RE: Continuation of Section 106 Compliance for the Pure Water Monterey Groundwater Replenishment Project, Monterey County, Clean Water State Revolving Fund Project No. C-06-8028-110 (your letter of February 12, 2018)

Dear Ms. Pierce:

The State Water Resources Control Board (Board) is continuing its consultation with the State Historic Preservation Officer (SHPO) on the above cited undertaking, in accordance with Section 106 of the *National Historic Preservation Act of 1966* (54 U.S.C. §306108) as amended, and its implementing regulations found at 36 CFR Part 800. The Environmental Protection Agency has delegated lead agency responsibility to the Board for carrying out the requirements of Section 106.

In a letter dated January 28, 2016, the Monterey Regional Water Pollution Control Agency (Agency) proposed to implement and construct the Pure Water Monterey Groundwater Replenishment Project (Project). Specifically, the proposed undertaking consisted of the elements and actions that you had described in detail in Table 1 (Construction Area of Disturbance and Permanent Footprint) which was included in your letter. The area of potential effect (APE) encompassed the elements and actions described in Table 1, which are located in seven separate areas. In a letter dated April 19, 2016, the SHPO offered the following comments: (1) did not object to your identification and delineation of the APE; (2) agreed with the Agency's decision to conduct the proposed undertaking in accordance with the mitigation measures described in your letter; and (3) did not object to your determination of No Historic Properties Affected for the proposed undertaking.

In your current letter, the Agency has amended the APE for the Reclamation Ditch Diversion portion of the original APE by enlarging it. The enlargement of the horizontal APE for the permanent facility is due to the addition of matting along the banks of the diversion structure. The vertical APE of the permanent facility will remain the same as before. The horizontal APE of the construction footprint was enlarged to allow for a larger staging area and to include the access roads.

The amended APE was included in the records review and pedestrian survey conducted for the original proposed undertaking. No cultural resources are located within the amended APE, but one prehistoric site with burials (CA-MNT-2246) is located approximately 800 feet to the south of the amended APE on the south side of State Route 183. That site will not be affected by the amended undertaking.

Native American consultation included contacting the Native American Heritage Commission (NAHC) and requesting a record search of their sacred land file, which was negative. On April 19, 2016 and July 14, 2017, request for comment letters were sent to the four Native American contacts provided by NAHC. No responses were received from the Tribes or tribal contacts.

Based on the records review, the pedestrian survey, and the tribal consultation, the Board has determined that a finding of No Historic Properties Affected remains appropriate for the amended project and has requested the SHPO to review and comment it. After reviewing the submitted information, the SHPO offers the following comments:

- The SHPO has no objections to identification and delineation of the amended APE, pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d); and
- The SHPO does not object to a finding of No Historic Properties Affected for the amended proposed undertaking, as described above.

Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, the Board may have additional future responsibilities for this undertaking under 36 CFR Part 800. Should cultural artifacts be encountered during ground disturbing activities, please halt all work until a qualified archaeologist can be consulted on the nature and significance of such artifacts.

If you have any questions or concerns, please contact the following member of my staff: Tristan Tozer at (916) 445-7027 or via e-mail at Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Attachment J: NEPAssist Reports and Data

(Accessed January 25, 2022)

U.S. Census Bureau and U.S. EPA American Indian Environmental Office's EPA Tribal Areas (1 of 4): Lower 48 States

Fish and Wildlife Service's National Wetland Inventory

FEMA's National Flood Hazard Layer

Sole Source Aquifer Data

U.S. EPA Non-Attainment Area Data

NEPAssist Report

Expanded Pure Water Monterey

January 25, 2022

Expanded Pure Water Monterey

1:84,750

0 0.75 1.5 3 mi

0 1.25 2.5 5 km

Earthstar Geographics, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Input Coordinates: 36.647809,-121.819909,36.644503,-121.787637,36.593525,-121.810983,36.600140,-121.843255,36.647809,-121.819909	
Project Area	6.54 sq mi
Within an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within a Federal Land?	yes
Within an impaired stream?	no
Within an impaired waterbody?	no
Within a waterbody?	no
Within a stream?	no
Within an NWI wetland?	Available Online
Within a Brownfields site?	no
Within a Superfund site?	no
Within a Toxic Release Inventory (TRI) site?	no
Within a water discharger (NPDES)?	yes
Within a hazardous waste (RCRA) facility?	yes

Within an air emission facility?	no
Within a school?	yes
Within an airport?	no
Within a hospital?	yes
Within a designated sole source aquifer?	no
Within a historic property on the National Register of Historic Places?	no
Within a Toxic Substances Control Act (TSCA) site?	no
Within a Land Cession Boundary?	yes
Within a tribal area (lower 48 states)?	no
Within the service area of a mitigation or conservation bank?	yes
Within the service area of an In-Lieu-Fee Program?	yes

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Attachment K: Draft Supplemental Environmental Impact Report

Available for review at www.purewatermonterey.org.

Attachment L: Final Supplemental Environmental Impact Report certified in April 2021

Available for review at www.purewatermonterey.org.