

ADDENDUM

TO THE

**EXPANDED PURE WATER MONTEREY/GROUNDWATER
REPLENISHMENT PROJECT**

SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT
STATE CLEARINGHOUSE NO. 2013051094

FOR THE

DEEP INJECTION WELL #6 CHANGES

November 2021



This page is intentionally blank.

TABLE OF CONTENTS

| | |
|--|----|
| I. Introduction and Background | 1 |
| II. Project Location/Facilities | 3 |
| III. Proposed Expanded PWM/GWR Project Changes | 3 |
| IV. Supplemental or Subsequent EIR Not Required | 7 |
| V. Comparison to the Conditions Listed in CEQA Guidelines §15162 | 8 |
| VI. Environmental Analysis..... | 9 |
| Aesthetics..... | 9 |
| Air Quality and Greenhouse Gas..... | 11 |
| Biological Resources: Fisheries | 12 |
| Biological Resources: Terrestrial | 12 |
| Cultural, Paleontological, and Tribal Resources | 14 |
| Energy and Mineral Resources..... | 15 |
| Geology, Soils, and Seismicity | 16 |
| Hazards and Hazardous Materials | 17 |
| Hydrology/Water Quality: Groundwater | 18 |
| Hydrology/Water Quality: Surface Water | 20 |
| Land Use, Agriculture, and Forest Resources | 21 |
| Marine Biological Resources | 22 |
| Noise and Vibration | 23 |
| Population and Housing | 24 |
| Public Services, Recreation, and Utilities | 25 |
| Traffic and Transportation | 26 |
| Water Supply and Wastewater Systems | 27 |
| VII. Cumulative Impacts Analysis | 28 |
| VIII. References | 30 |
| IX. Addendum Preparers, Agencies And Persons Consulted | 31 |

LIST OF FIGURES

| | |
|---|---|
| 1. Expanded PWM/GWR Overview Map | 4 |
| 2. Approved Expanded Injection Well Areas | 5 |
| 3. Changes Since Certification of SEIR..... | 6 |

LIST OF APPENDICES

- A. Federal Environmental Consultation Project Description
- B. Summary of Impacts and Mitigation Measures
- C. Mitigation Monitoring and Reporting Program

I. INTRODUCTION AND BACKGROUND

This document is an Addendum to the Supplemental Environmental Impact Report for the Expanded Pure Water Monterey Groundwater Replenishment Project (Exp. PWM/GWR Project), certified by the Monterey One Water Board of Directors on April 26, 2021 (State Clearinghouse No. 2013051094). In this document, the Supplemental Environmental Impact Report is referred to as the 2021 Certified SEIR. This Addendum has been prepared pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, §21000 et seq) by Monterey One Water.

The PWM/GWR Project Final EIR was certified and the PWM/GWR Project was approved by the Monterey Regional Water Pollution Control Agency Board of Directors on October 8, 2015. Monterey Regional Water Pollution Control Agency changed its name in 2017 and is now referred to herein as Monterey One Water (M1W).

The M1W Board of Directors approved the PWM/GWR Project as modified by the Alternative Monterey Pipeline and the Regional Urban Water Augmentation Project (RUWAP) alignment for the Product Water Conveyance pipeline and booster pump station. After approval of the PWM/GWR Project, minor changes to components of the PWM/GWR Project were subject to discretionary action by responsible agencies. These actions included approval of the Hilby Pump Station and minor re-alignments to the Monterey Pipeline. These actions did not require discretionary approval by M1W, thus, Addendum No. 1 and Addendum No. 2 to the PWM/GWR Project Final EIR were prepared and approved by Monterey Peninsula Water Management District's (MPWMD) Board of Directors (acting as responsible agency) on June 20, 2016, and March 6, 2017, respectively. The State Water Resources Control Board (SWRCB) adopted its own environmental review document complying with CEQA and the federal cross-cutters (CEQA+) on January 28, 2017 enabling funding of the project through Proposition 1 and the State Revolving Fund (partially funded by the U.S. Environmental Protection Agency).

In October 2017, the M1W Board of Directors approved Addendum No. 3 to the PWM/GWR Project Final EIR. Addendum No. 3 addresses changes to the PWM/GWR Project including an increase to the peak capacity of the Advanced Water Purification Facility (AWPF) from 4 million gallons per day (mgd) to 5 mgd. This increase in capacity would enable delivery of up to 600 acre-feet-per year (AFY) of purified recycled water to Marina Coast Water District's (MCWD's) customers for urban irrigation. The Board action also included an approval of the joint use of a MCWD conveyance pipeline and storage tank (Blackhorse Reservoir) for delivering water to urban irrigation customers and to the groundwater replenishment injection wells in the Seaside Groundwater Basin. The MCWD conveyance pipeline is a component of the RUWAP. The RUWAP is an urban recycled water project developed by MCWD.¹

National Environmental Policy Act (NEPA) compliance has also been conducted for the PWM/GWR Project related to separate actions by federal agencies. The Bureau of Reclamation prepared an Environmental Assessment (EA) and issued a Finding of No Significant Impact (FONSI) to comply with NEPA for Title XVI funds to be awarded to the PWM/GWR Project (April 2017). The National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, also prepared an EA and issued a FONSI for their

¹ MCWD has conducted its own environmental review of the RUWAP project, including an EIR and three addenda (MCWD, October 2006, February 2007, and April 2017). MCWD received federal approvals for use of easements over U.S. Army land. Addendum No. 3 to the RUWAP EIR described and analyzed the RUWAP for shared use of facilities between the PWM/GWR Project and the RUWAP and delivery of up to 600 AFY to the former Fort Ord for urban irrigation. On April 18, 2017, MCWD adopted Addendum No. 3 to the RUWAP EIR for the construction of one single transmission pipeline and related facilities to deliver purified recycled water from the AWPF to the Seaside Groundwater Basin for the PWM/GWR Project and to MCWD's irrigation customers for the RUWAP Project.

action to authorize re-issuance of a National Pollutant Discharge Elimination System Permit that included discharges from the project operating at its peak capacity of 5 mgd.

Expanded PWM/GWR Project

In May and June of 2019, M1W, as Lead Agency, prepared a Notice of Preparation and conducted a public scoping meeting for a Supplemental EIR (SEIR) to evaluate the Proposed Modifications to the PWM/GWR Project, that would result in an expanded project, the Exp. PWM/GWR Project.

The Draft SEIR was completed and distributed for public review on November 7, 2019. M1W conducted a public meeting on December 12, 2019. In December 2019, M1W received several letters requesting that M1W extend the public review period for the Draft SEIR, including several requesting the review period be extended to end on January 31, 2020. Numerous other letters and phone calls requested that M1W maintain the public review period deadline of December 23, 2019. In response to these letters, M1W conducted a special Board of Directors meeting on December 19, 2019; and, at this meeting the Board of Directors voted to extend the public review period to January 31, 2020.

During the comment period, M1W received written comments from state and local agencies, organizations, and individuals. A total of 52 comment letters or emails were received on the Draft SEIR or on the Proposed Modifications during the public review period. In addition, oral comments were received at the public meeting and by phone. The Final SEIR for the Proposed Modifications to the PWM/GWR Project (2020 Final SEIR) addressed the public comments received during the review period and was completed and made available to public agencies and members of the public on April 13, 2020. The M1W Board considered but did not certify the Final SEIR in 2020 and did not approve the Exp. PWM/GWR Project.

After completion of the 2020 Final SEIR, minor changes to the Injection Well Facilities of the Proposed Modifications became necessary. Namely, after completion of the 2020 Final SEIR, M1W proceeded with construction of two of the previously approved injection wells. Information gathered during the construction of the two previously approved injection wells lead M1W to the conclusion that only one additional deep well was necessary in the Expanded Injection Well Area. The 2020 Final SEIR included three (3) wells in the Expanded Injection Well Area, one (1) new well and two (2) previously approved relocated wells. The Environmental Memorandum described below identifies the Expanded Injection Well Area as a location for potential future replacement wells if replacement of existing wells were to be needed, but no replacement wells were proposed for approval at that time.

Prior to the certification of the 2020 Final SEIR, an Environmental Memorandum was prepared to address the changes described above. The Environmental Memorandum summarizes the changes to the project description and resulting changes to the environmental analysis and conclusions by topical area since the 2020 Final SEIR. Exhibits were attached to support the information in the Environmental Memorandum including a list of changes to the project description, a complete revised project description, and a summary of environmental impacts and mitigation measures of the project with changes. On April 26, 2021, the M1W Board of Directors certified the 2020 Final EIR as amended by the Environmental Memorandum, this document is referred to as the 2021 Certified SEIR.

The 2021 Certified SEIR contained all comments received during and immediately after the public comment period on the Draft SEIR, together with written responses to significant environmental issues raised in those comments, which were prepared in accordance with CEQA and the CEQA Guidelines and the Environmental Memorandum described above.

This Addendum addresses additional changes to the Exp. PWM/GWR Project to relocate a previously approved well from Well Site #1 to Well Site #7, to add approximately 1.2 miles of purified recycled water conveyance pipeline, and to relocate the previously approved backflush basin to a new site (These changes are referred to at the proposed Deep Injection Well #6 Changes, below)². Additional detail about these changes is provided in **Section III. Proposed Expanded PWM/GWR Project Changes**, below.

II. PROJECT LOCATION/FACILITIES

The Exp. PWM/GWR Project facilities, including the original and modified project facilities, are located within unincorporated areas of the Salinas Valley in Monterey County and within the cities of Salinas, Marina, Monterey, Pacific Grove, and Seaside. The proposed Deep Injection Well #6 Changes would occur within the approved project area of the Exp. PWM/GWR Project as shown in **Figure 1. PWM/GWR Overview Map**. The project setting would not change as a result of the proposed Deep Injection Well #6 Changes.

III. PROPOSED EXPANDED PWM/GWR PROJECT CHANGES

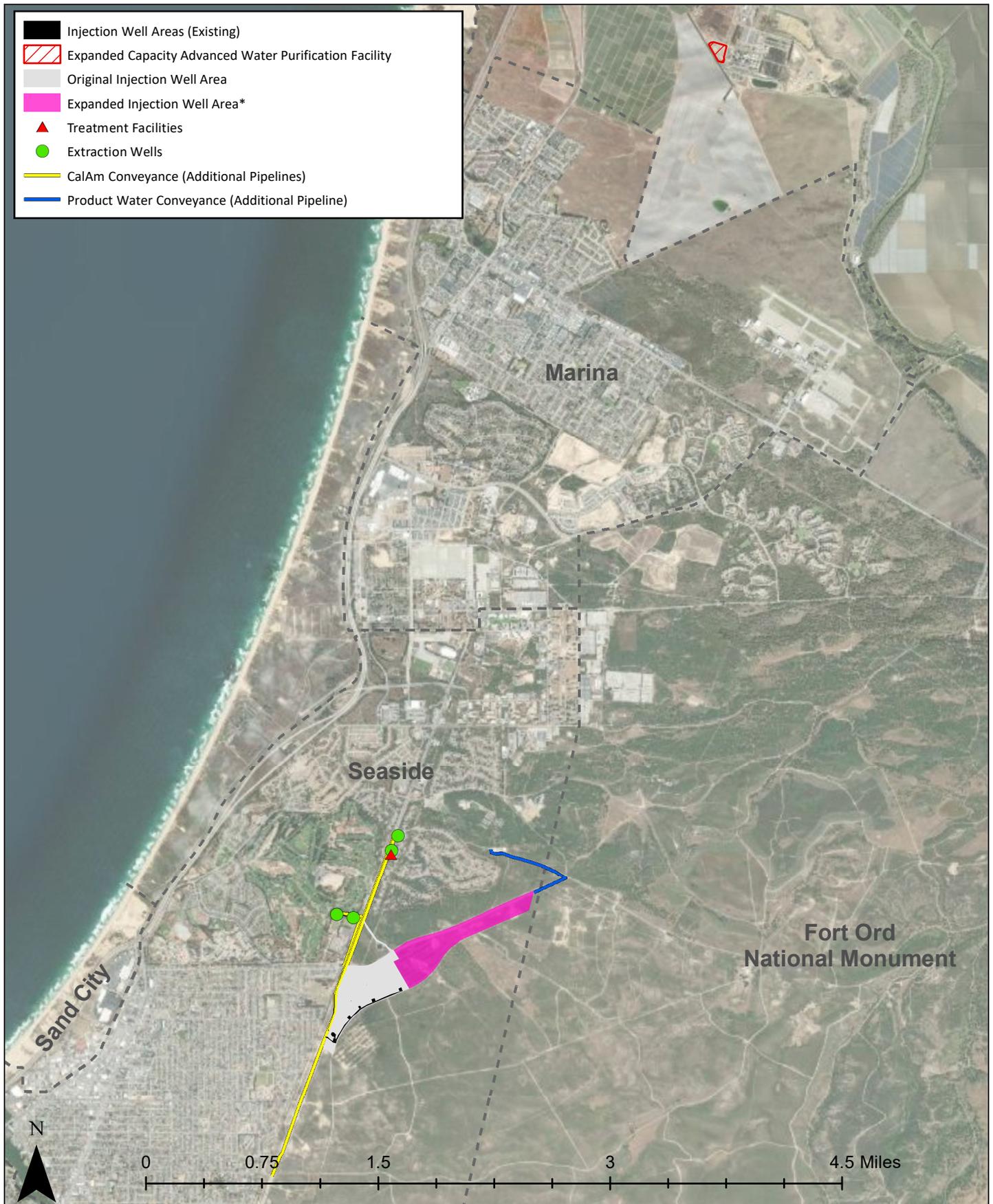
Overview of the Proposed Project Changes

In April 2021, M1W approved expanding the existing PWM/GWR Project to create the Exp. PWM/GWR Project which included an additional injection well, specifically a new deep injection well at Well Site #6 within the Expanded Injection Well Area. The approval also assumed a conveyance pipeline from the Blackhorse Reservoir to Well Site #6 and a backflush basin between Well Sites #5 and #6. See **Figure 2. Approved Expanded Injection Well Areas**.

The proposed changes referenced as “Deep Injection Well #6 Changes” evaluated in this Addendum include the following as shown in **Figure 3. Changes Since Certification of SEIR**, below:

1. *Relocation of an Approved Injection Well from Well Site #1 to Well Site #7*: The vadose (shallow) zone well previously approved as part of the base project at Well Site #1 would be relocated to Well Site #7 as a deep injection well, referred to as Deep Injection Well #6. This change would result in two (2) proposed deep injection wells within the Expanded Injection Well Area rather than just one. This change does not increase the number of approved wells; the total number will remain nine (9). The depth of the well would increase from 600 to 1,100 feet below ground surface.
2. *Extension of Pipeline*: A pipeline would continue to and past Well Site #7 and would terminate at Well Site #1. This extension of the pipeline would increase the flexibility of the system to carry water at the pressure needed at all injection wells. The total length of this pipeline would be increased from 1.1 miles to 2.3 miles.
3. *Relocation of Approved Backflush Basin*: The location for the backflush basin would be relocated from between Well Site #5 and Well Site #6 to between Well Site #6 and Well Site #7 to reduce grading.

² A vadose zone well was previously proposed to be located at Well Site #1, this Addendum covers the relocation of that well to Well Site #7.



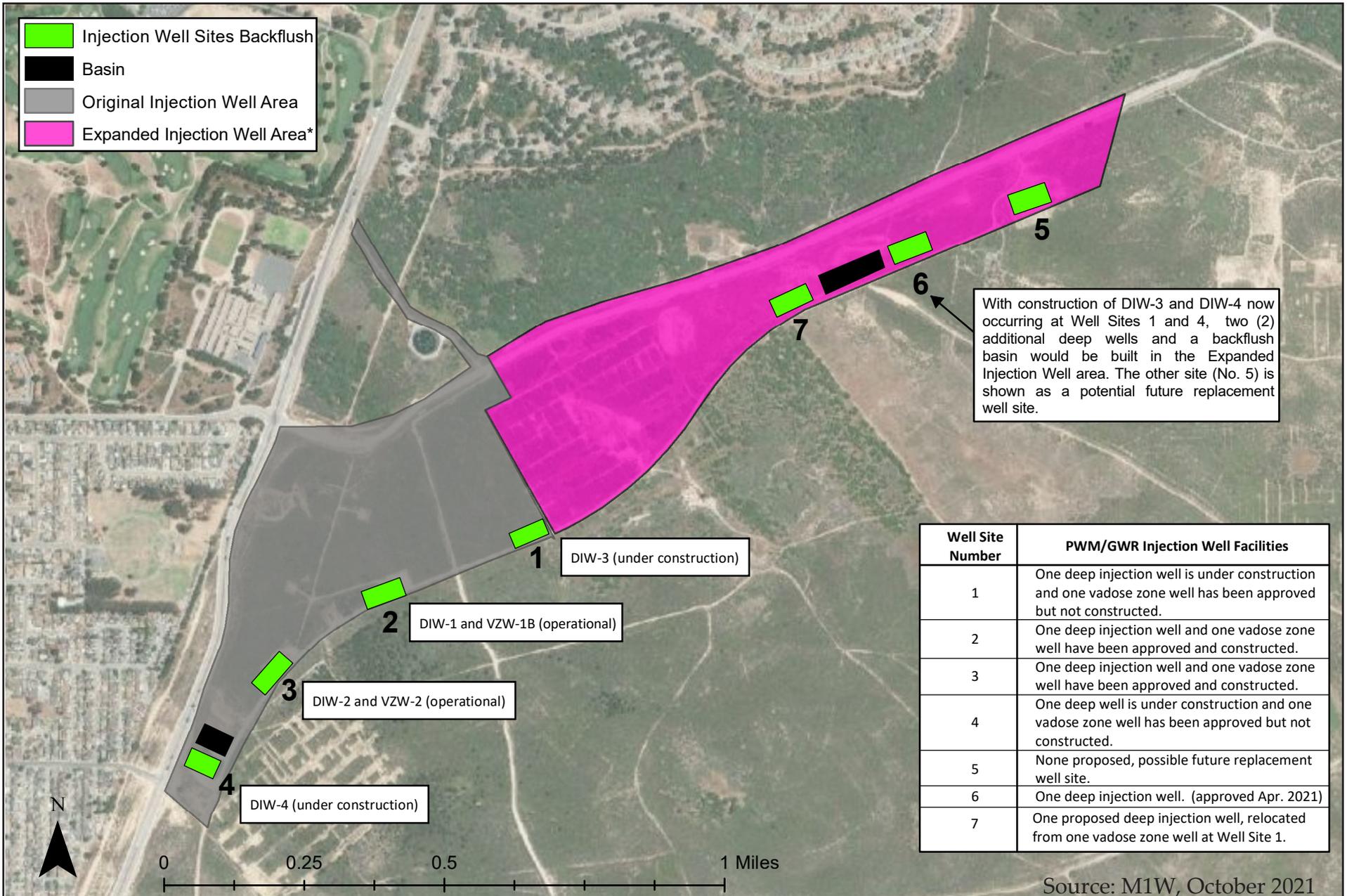
Expanded PWM/GWR Overview Map

November 2021

Expanded PWM/GWR Project
Addendum to the SEIR
Deep Injection Well #6 Changes

Figure
1

*The Expanded Injection Well Area was approved as part of the 2021 Certified EIR.

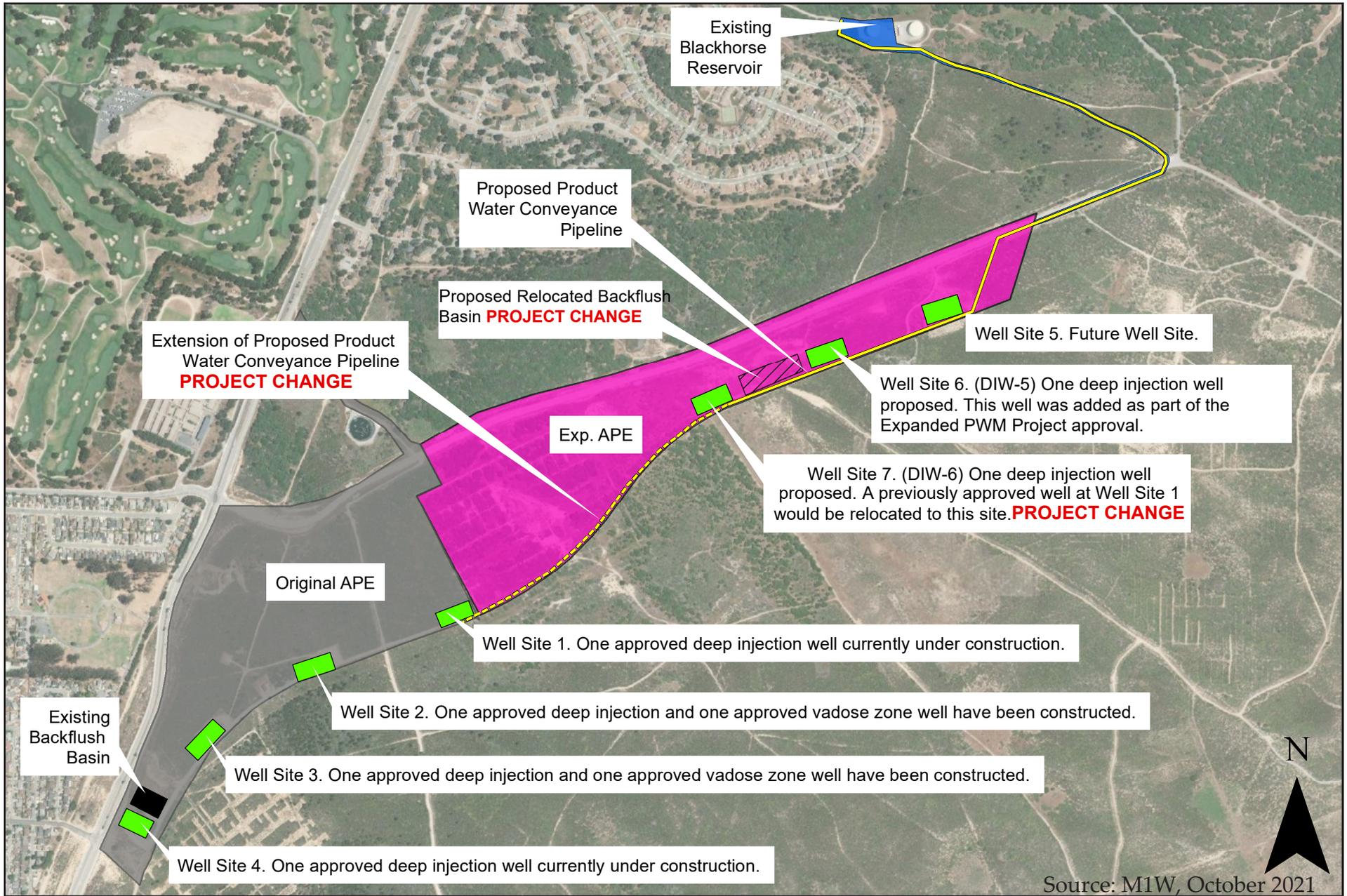


Approved Expanded Injection Well Areas
 November 2021

Expanded PWM/GWR Project
 Addendum to the SEIR
 Deep Injection Well #6 Changes

Figure
2

* The Expanded Injection Well Area was approved as part of the 2021 Certified EIR.



Changes Since Certification of SEIR

November 2021

Expanded PWM/GWR Project
Addendum to the SEIR
Deep Injection Well #6 Changes

Figure
3

Appendix A contains the Project Description for federal consultation. The purpose of the document is to provide the basis for reports being prepared for the Exp. PWM/GWR Project for the SWRCB and U.S. Environmental Protection Agency to consult with federal agencies responsible for Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) compliance. That description is consistent with the project changes proposed in this Addendum.

IV. SUPPLEMENTAL OR SUBSEQUENT EIR NOT REQUIRED

Under CEQA, a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to the EIR but none of the conditions described in State CEQA Guidelines section 15162 calling for preparation of a subsequent EIR have occurred (State CEQA Guidelines, §15164(b)).

State CEQA Guidelines section 15162 provides that when an EIR has been adopted for a project, a subsequent EIR or EIR shall be prepared for that project if the lead agency determines one or more of the following have occurred:

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the EIR shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR or EIR;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

An addendum need not be circulated for public review and can be attached to the adopted EIR (State CEQA Guidelines, §15164(c)). Although not required by CEQA, the SWRCB Division of Financial Assistance requires addenda to EIRs to be distributed to the public for review and comment for a time period determined by the CEQA lead agency (Kashkoli, A., and Cary, B. personal communication, October 8, 2021 and November 10, 2021).

This Addendum has been prepared pursuant to CEQA Guidelines Section 15164, which states: “A lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or

additions are necessary but none of the conditions described in §15162 calling for preparation of a subsequent EIR have occurred.”

The following discussion summarizes the reasons why a subsequent or supplemental EIR, pursuant to CEQA Guidelines Section 15162, is not required in connection with approvals for the proposed Deep Injection Well #6 Changes, and why an addendum is appropriate. As explained below in **Section VI**, substantial evidence supports the conclusion that the proposed Deep Injection Well #6 Changes would not result in new significant environmental effects or a substantial increase in the severity of a significant effect previously identified in the PWM/GWR EIR or RUWAP EIR. Additionally, there is no new information that shows new significant environmental effects or an increase in the severity of previously identified significant effects. Nor is there new evidence showing that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, or that mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment. For these reasons, preparation of an addendum is appropriate under these circumstances.

V. COMPARISON TO THE CONDITIONS LISTED IN CEQA GUIDELINES §15162

Environmental Effects

As detailed in **Section VI, Environmental Analysis**, the proposed Deep Injection Well #6 Changes would not result in any new significant environmental effects that cannot be mitigated with existing, previously identified mitigation measures in the 2021 Certified SEIR. In addition, the proposed Deep Injection Well #6 Changes as fully described in **Section III. Proposed Expanded PWM/GWR Project Changes** would not substantially increase the severity of any significant environmental effects identified in the 2021 Certified SEIR. The proposed Deep Injection Well #6 Changes would not result in any new significant impacts that were not previously disclosed in connection with the construction of the Exp. PWM/GWR Project. See additional detail in **Section V. Environmental Analysis**, below.

New Information

No new information has been identified or presented to M1W showing that the proposed Deep Injection Well #6 Changes would result in: 1) significant environmental effects not identified in the 2021 Certified SEIR, or 2) an increase in the severity of significant impacts identified in the 2021 Certified SEIR. Further, no new information has been identified or presented to M1W showing that mitigation measures or alternatives which were previously determined not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, or mitigation measures or alternatives that are considerably different from those identified in the 2021 Certified SEIR would be feasible and would substantially reduce one or more significant effects of the project.

Conclusion

Section 15164 of the CEQA Guidelines states that a lead agency or responsible agency shall prepare an addendum to a previously certified EIR (in this case, a certified SEIR) if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a supplemental or subsequent EIR have occurred. Based on the information in this Addendum, M1W has determined that:

- No new significant environmental effects or a substantial increase in the severity of previously identified significant effects would occur as a result of operation of the proposed Deep Injection Well #6 Changes;
- No substantial changes have occurred or would occur with respect to the circumstances under which the Exp. PWM/GWR Project was originally undertaken, which would require major revisions to the previously certified 2021 Certified SEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and
- No new information of substantial importance has been received or discovered, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2021 Certified SEIR was certified as complete.
- None of the conditions or circumstances that would require preparation of a subsequent or supplemental EIR pursuant CEQA Guidelines Section 15162 exists.

VI. ENVIRONMENTAL ANALYSIS

The following section consists of an analysis of the potential environmental effects associated with the proposed Deep Injection Well #6 Changes. This section includes a summary of existing environmental documentation prepared for the Exp. PWM/GWR Project. Following the discussion of the findings of the prior environmental analyses, this section presents an analysis of potential environmental effects associated with the proposed Deep Injection Well #6 Changes. Finally, each individual topic section includes a conclusion regarding the potential environmental effects associated with the proposed Deep Injection Well #6 Changes. Specifically, under each section, a determination is made if the proposed project modifications would result in any new significant environmental effects or substantially increase the severity of a previously identified significant effect.

The proposed Deep Injection Well #6 Changes are located within the same project sites and area as the approved Exp. PWM/GWR Project and thus discussion of the regional and local environmental and regulatory setting for the injection wells, provided in detail in the 2021 Certified SEIR, also applies to the proposed Deep Injection Well #6 Changes. The 2021 Certified SEIR used the terms, “Expanded Injection Well Area” and, “Approved Injection Well Area” to reference the proposed and existing areas including injection well facilities that were discussed in that document. The analysis below uses the term “Injection Well Facilities Area” to refer to the entire area including injection wells facilities.

The proposed Deep Injection Well #6 Changes would incorporate and implement mitigation measures identified in the 2021 Certified SEIR Mitigation Measure Monitoring Program (MMRP) as adopted by the M1W Board of Directors upon certifying the SEIR and approving the Exp. PWM/GWR Project in April 2021. Specific mitigation measures relevant to a particular impact of the proposed Deep Injection Well #6 Changes are cited in the same manner as in the 2021 Certified SEIR below. The MMRP adopted in conjunction with the Exp. PWM/GWR Project approvals is included as **Appendix C** of this Addendum.

Aesthetics

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for aesthetic resources. The well site for the new deep injection well would be located

within the same Expanded Injection Well Area as was presented in the 2021 Certified SEIR for the Exp. PWM/GWR Project.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

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

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

Deep Injection Well #6 Changes would result in similar impact determinations for aesthetic resources during construction and operation as identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The change in location of one injection well from Well Site #1 to Well Site #7 would move the proposed injection well to the east, which is farther from the nearest sensitive receptors located to the west of General Jim Moore Boulevard.
- 2) *Extension of Pipeline:* The extension of a pipeline southwest from Well Site #7 to Well Site #1 would be located below-grade and would not be visible to the public similar to other underground infrastructure, such as the approved wells.
- 3) *Relocation of Approved Backflush Basin:* The location for the backflush basin would be relocated from between Well Site #5 and Well Site #6 to between Well Site #6 and Well Site #7. The backflush basin would also be below-grade and the changed location of this improvement would not be visible from the public roadway.

The proposed Deep Injection Well #6 Changes would not change the physical boundaries or increase the size of the PWM/GWR Injection Well Facilities. The proposed Deep Injection Well #6 Changes would not adversely affect the scenic vista, damage scenic resources, or degrade the visual character of the site as the majority of the facilities would be underground. Further, there are no significant changes proposed in the appearance or improvements of the facilities and no new nearby sensitive receptors. The effects of above-ground structures at the Expanded Injection Well Area would be the same as what was identified in the 2021 Certified SEIR because the same number of injection wells would be built. The construction and operation of the wells would generate similar light and glare as evaluated in the 2021 Certified SEIR; these impacts have been identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities component of the Exp. PWM/GWR Project would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more

information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for aesthetic resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Air Quality and Greenhouse Gas

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for air quality and greenhouse gas emissions. The injection wells would be located within the same project area and air basin as was presented in the 2021 Certified SEIR.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

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

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact to air quality and greenhouse gas emissions during construction and operation as identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* air quality emissions would not exceed previously approved emissions (April 2021 Expanded PWM/GWR Project) due to comparable drilling and other constructions.
- 2) *Extension of Pipeline:* Pipeline would be longer than anticipated in the SEIR however, the method of construction will be horizontal directional drilling which would not result in substantial increase in emissions compared to those emissions already accounted for in the Expanded PWM Project SEIR analysis.
- 3) *Relocation of Approved Backflush Basin:* A reduction in emissions would occur associated with relocating this component because the new site would require less grading.

The proposed Deep Injection Well #6 Changes would result in the same number of injection wells as were previously analyzed in the 2021 Certified SEIR, and new construction would be in the same geographic

area. Construction methods and requirements would not change. Overall, there would no additional construction disturbance, increase in construction or operational emissions or increase to operational air quality effects. Operation of the Exp. PWM/GWR Project with the proposed Deep Injection Well #6 Changes would not expose any new sensitive receptors or generate additional GHG emissions, either directly or indirectly. Further, the nine injection wells have already been fully evaluated for impacts to air quality and potential impacts to greenhouse gases due to well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities component of the Exp. PWM/GWR Project would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for air quality and greenhouse gases. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Biological Resources: Fisheries

The Injection Well Facilities, including the proposed Deep Injection Well #6 Changes, are not located within close proximity to an aquatic resource supporting fisheries resources. Construction and operation of the Injection Well Facilities would not result in any operational changes to the surface water diversions (Reclamation Ditch and Blanco Drain) that are part of the approved PWM/GWR Project. No further discussion is included because there would be no impact to this resource associated with the Injection Well Facilities.

Biological Resources: Terrestrial

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for terrestrial biological resources. The well site for the new injection well would be within the same Expanded Injection Well Area as was presented in the 2021 Certified SEIR.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Construction Impacts to Special-Status Species and Habitat (BT-1)
- Construction Impacts to Sensitive Habitats (BT-2)
- Construction Conflicts with Local Policies, Ordinances, or Approved Habitat Conservation Plan (BT-3)

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan.
- Mitigation Measure BT-1a: Implement Construction Best Management Practices.
- Mitigation Measure BT-1b: Implement Construction-Phase Monitoring.

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

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would not result in new levels of impact to biological resources during construction and operation beyond what was analyzed in the 2021 Certified SEIR. Protocol-level surveys conducted in 2019 encompassed the majority of the area identified for the proposed Deep Injection Well #6 Changes and Mitigation Measure BT-1f would require additional protocol-level botanical surveys to be conducted within areas that had not been surveyed in 2019. Mitigation Measure BT-1f also requires that M1W to consult with the California Department of Fish and Wildlife (CDFW) to obtain coverage under the California Endangered Species Act (CESA) if state listed plants are identified during the protocol-level botanical surveys.³ Identification of new species or new populations of species previously identified would also be covered by Mitigation Measures included in the 2021 Certified EIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocated injection well at Well Site #7 is proposed to be located in an area considered ruderal/disturbed.
- 2) *Extension of Pipeline:* The extension of the pipeline to the southwest from Well Site #7 to Well Site #1 would be located within the existing dirt road in the Injection Well Area. This area is considered developed.
- 3) *Relocation of Approved Backflush Basin:* The previous location for the backflush was considered ruderal/disturbed and central coastal scrub. The new location of the backflush basin is considered ruderal/disturbed.

The majority of the Expanded Injection Well Area has been surveyed for special-status plant and wildlife species following accepted survey protocols. Areas for relocation or extension of facilities are primarily located in an areas considered ruderal/disturbed. Additionally, areas that were not surveyed previously will be subject to additional protocol-level botanical surveys per Mitigation measure BT-1f. All mitigation

³ Protocol-level botanical surveys must occur during the spring and/or summer, depending on the potential plant species onsite. Due to the accelerated schedule for construction of the proposed Deep Injection Well #6 Changes, M1W may choose to adjust the design in order to avoid listed species. This would eliminate the need for consultation with CDFW, which would likely reduce the timeline and enable construction to begin sooner.

measures applicable to the Injection Well Facilities component of the PWM/GWR Project would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for biological resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Cultural, Paleontological, and Tribal Resources

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for cultural, paleontological, and tribal resources. The location of these facilities is proposed in the same cultural setting and under the same regulatory framework as identified in the 2021 Certified SEIR.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

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

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact to cultural, paleontological, and tribal resources during construction and operation as was identified in the 2021 Certified SEIR. Prior cultural resource surveys and completed consultations with Native Americans and the State of California Office of Historic Preservation have covered the entire width and depth of construction activities associated with the proposed Deep Injection Well #6 Changes.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7*: The entire Injection Well Facilities Area was evaluated in the 2021 Certified SEIR. The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the boundary of the area previously evaluated.
- 2) *Extension of Pipeline*: The entire Injection Well Facilities Area was evaluated in the 2021 Certified SEIR. The extension of a pipeline to the southwest from Well Site #7 to Well Site #1 would not change the boundary of the area previously evaluated.

- 3) *Relocation of Approved Backflush Basin*: The entire Injection Well Facilities Area was evaluated in the 2021 Certified SEIR. The relocation of the backflush basin from between Well Site #5 and #6 to between Well Sites #6 and #7 would not change the boundary of the area previously evaluated.

The proposed Deep Injection Well #6 Changes would not increase the size of the construction zone for the Injection Well Facilities; this entire project area was evaluated in the 2021 Certified SEIR. The Injection Well Facilities has previously been evaluated for cultural, paleontological, and tribal resources and mitigation measures have been incorporated to minimize impacts in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for cultural, paleontological, and tribal resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Energy and Mineral Resources

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for energy and mineral resources. The geographic and regulatory setting for energy resources is not changed and there are no significant mineral resources in the vicinity of the Injection Well Facilities.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

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

Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact related to energy use during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7*: The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not increase the energy use of the project. No addition wells are proposed as part of the proposed Deep Injection Well #6 Changes.

- 2) *Extension of Pipeline*: The pipeline extension will create a looped system, and system pressure and conveyance will be provided by the existing Product Water Pump Station and the Blackhorse Reservoir. There would be no additional pumping to fully pressurize the pipeline or to move water; therefore, the operational energy analysis remains the same as was evaluated in the 2021 Certified SEIR for the Expanded PWM Project.
- 3) *Relocation of Approved Backflush Basin*: The relocation of the backflush basin would not increase the amount of energy used by the project. The basin would be operated in the same manner as previously evaluated in the 2021 Certified SEIR.

Construction of the proposed Deep Injection Well #6 Changes would have the same construction techniques and requirements as previously analyzed in the 2021 Certified SEIR. Well operations would not change in terms of the consumption of energy nor would the proposed Deep Injection Well #6 Changes result in the unnecessary, wasteful, or inefficient use of energy resources. The nine injection wells and related facilities have already been fully evaluated for impacts related to energy use due to well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for energy and mineral resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Geology, Soils, and Seismicity

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for geology, soils, and seismicity. The location of these facilities would remain in the same general geological setting and under the same regulatory framework.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

All the impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact related to geology, soils, and seismicity during construction and operation as was identified in the 2021 Certified SEIR. The Injection Well Area was analyzed in the PWM/GWR Project EIR and the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the level of impact to geological resources. In addition, geological conditions at Well Site #7 have previously been evaluated in the 2021 Certified SEIR, which concluded that construction and operational impacts would be less-than-significant at the site.
- 2) *Extension of Pipeline:* The extension of a pipeline from Well Site #7 to Well Site #1 is located within Injection Well Facilities Area, all of which has been previously evaluated in the 2021 Certified SEIR and the PWM/GWR Project EIR.
- 3) *Relocation of Approved Backflush Basin:* The relocation of the backflush basin would not result in an increase or change in the level of geological impacts. The new location of the backflush basin is within the Injection Well Facilities Area and has been previously evaluated in the 2021 Certified SEIR and the PWM/GWR Project EIR.

Geologic and soils conditions are consistent in the Injection Wells Facilities Areas as reported in the 2021 Certified SEIR. The proposed Deep Injection Well #6 Changes would not alter the extent of potential geologic and soils related effects due to ground-disturbing activities (e.g., soil erosion, etc.). No new or substantially more severe geologic and soils related effects would occur due to the proposed changes. The nine injection wells and related facilities have already been fully evaluated for impacts related geologic and soils from well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. The 2021 Certified SEIR did not include any additional mitigation measures for geology, soils and seismicity. Construction Best Management Practices (BMPs) applicable to the Injection Well Facilities would continue to be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect related to geology, soils, and seismicity. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Hazards and Hazardous Materials

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for hazards and hazardous materials.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

- Use and Disposal of Hazardous Materials During Construction (HH-1)
- Accidental Release of Hazardous Materials During Construction (HH-2)

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

All the impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impacts related to hazards and hazardous materials during construction and operation as was identified in the 2021 Certified SEIR.

- *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the level of impacts to geological resources. Construction and operation of the injection well, which could potentially include the use of hazardous materials, would not differ from that of previously approved deep injection wells. The relocation of Deep Injection Well #6 would not change the overall number of wells approved for the project.
- *Extension of Pipeline:* The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 would not increase the use of hazardous materials, nor would it increase the risk of other hazards.
- *Relocation of Approved Backflush Basin:* The relocation of the backflush basin would not change the use of hazardous materials assumed in the 2021 Certified SEIR for the backflush basin.

The Injection Well Facilities Area has already been evaluated for impacts related to hazards and hazardous materials in the PWM/GWR Project EIR and 2021 Certified SEIR. The transport and use of such materials would not change. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect related to hazards or hazardous materials. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Hydrology/Water Quality: Groundwater

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for groundwater hydrology and water quality. The facilities would remain in the same general setting related to groundwater hydrology and water quality and under the same regulatory framework.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

All the impacts above were identified to be less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact to hydrology and water quality of groundwater during construction as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* Under the proposed Deep Injection Well #6 Changes, the vadose zone well that was approved at Well Site #1 is proposed to be relocated to Well Site #7 in the Expanded Injection Well Area. The Approved and Expanded Injection Well Areas have been analyzed in the PWM/GWR Project EIR and the 2021 Certified SEIR for locations for up to nine (9) injection wells and up to eight (8) monitoring wells. With an additional well in the Expanded Injection Well Area, a total of six(6) deep and two (2) shallow wells will be available for injection of the expanded volumes of purified water proposed to be injected (i.e., up to 5,950 AFY), with two constructed shallow wells and one approved, but not constructed vadose zone well, still available in the Approved Injection Well Area.
- 2) *Extension of Pipeline:* The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 would not increase impacts to groundwater resources.
- 3) *Relocation of Approved Backflush Basin:* Impacts to the groundwater resources resulting from the operation and construction of the backflush basin where previously evaluated in the 2021 Certified SEIR. The relocation of the backflush basin from between Well Sites #5 and #6 to between Well Sites #6 and #7 would not change the conclusions of the 2021 Certified SEIR.

Analysis of existing and projected future well capacities completed for the 2021 Certified SEIR have found that excess capacity would be available to support adaptive management of the amount of injection into each well based on the results of groundwater modeling and monitoring. With six deep injection wells and two shallow wells, current analysis shows that the proposed injection volume of yield can be accommodated without operating every well at its full injection capacity and with one standby well. Based on this analysis, if modeling were to show travel time that does not meet minimum regulatory requirements, then wells can be placed into standby mode to ensure adequate response retention time and to provide acceptable underground travel time to support the relevant log removal value credits needed for virus and pathogen reduction.

In addition, as part of an amended Engineering Report required for the permit to expand the project, M1W intends to pursue additional virus and pathogen reduction credits (referred to as Log Removal Value or LRV). Currently, M1W does not utilize any credit for known pathogen and virus removal in the existing primary and secondary treatment and ozonation systems, which are known to inactivate or reduce viruses

and pathogens. Currently, M1W is also pursuing credits for virus inactivation using chloramines in the conveyance system (which also minimize biofouling in the injection wells) using residual chlorine in the conveyance system to demonstrate reduction or inactivation of viruses and pathogens.

Further documentation of the ability for M1W to meet or exceed water quality regulatory requirements will be included in an amended Engineering Report, through additional virus and pathogen credits and through maintaining adequate underground retention time demonstrated by groundwater modeling. M1W will submit the required documentation to the State Water Resources Control Board Division of Drinking Water and to the Regional Water Quality Control Board for review and approval prior to increasing injection beyond the permitted injection volumes.⁴ Further, the nine injection wells (existing, under construction, and proposed) have already been evaluated for other impacts to groundwater depletion, levels, and quality due to well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. The conclusions regarding groundwater hydrology and water quality would be the same for the Exp. PWM/GWR Project with the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for groundwater resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

As described above, the proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Hydrology/Water Quality: Surface Water

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for surface water hydrology and water quality. The facilities would remain in the same general setting related to surface water and under the same regulatory framework.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

⁴ Note: M1W recently submitted an Engineering Report Addendum (September 30, 2021) and a Report of Waste Discharge (October 29, 2021) for the new deep wells (DIW-3 and DIW-4) and for increasing injection volumes on an interim basis from 3,700 AFY to up to 4,300 AFY for the purpose of augmenting yield for California American Water Company by 600 AFY in advance of completion of the Exp. PWM Project facilities.

The above impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact to hydrology and water quality of surface water during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The 2021 Certified SEIR previously evaluated hydrological impacts related to surface water for nine wells. The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. In addition, hydrological impacts related to surface water at Well Site #7 have previously been evaluated in the 2021 Certified SEIR.
- 2) *Extension of Pipeline:* The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 would not increase impacts to surface water. All relevant BMPs associated with pipeline installation included in the PWM/GWR Project EIR and the 2021 Certified SEIR would be applicable.
- 3) *Relocation of Approved Backflush Basin:* Impacts to the hydrology and water quality of surface water for the backflush basin where previously evaluated in the 2021 Certified SEIR. The relocation of the backflush basin from between Well Sites #5 and #6 to between Well Sites #6 and #7 would not change the conclusions of the 2021 Certified SEIR.

The Injection Well Facilities Area has been analyzed in the PWM/GWR Project EIR and the 2021 Certified SEIR. Further, the nine injection wells have already been fully evaluated for impacts to hydrology and water quality and potential impacts to surface water quality due to well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for surface water resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Land Use, Agriculture, and Forest Resources

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for land use, agriculture and forest resources. All facilities would remain in the same jurisdictional setting and land use setting as were previously identified in the 2021 Certified SEIR; therefore, the environmental and regulatory framework would not change. There are no agricultural or forest resources in the vicinity of the Injection Well Facilities Area.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- All other mitigation measures included in the 2021 Certified SEIR.

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impacts related to land use during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. In addition, the proposed Deep Injection Well #6 Changes are within the previously evaluated Injection Well Facilities Area and therefore are within the same jurisdiction as previously evaluated in the 2021 Certified SEIR. This area has previously been evaluated for land use and planning impacts.
- 2) *Extension of Pipeline:* The extension of a pipeline to the southwest from Well Site #7 to Well Site #1 is within the previously evaluated Injection Well Facilities Area and, therefore, are within the same jurisdiction as previously evaluated in the 2021 Certified SEIR. This area has previously been evaluated for land use and planning impacts.
- 3) *Relocation of Approved Backflush Basin:* The new location of the backflush basin is within the previously evaluated Injection Well Facilities Area and, therefore, is within the same jurisdiction as previously evaluated in the 2021 Certified SEIR. This area has previously been evaluated for land use and planning impacts.

The nine injection wells and related facilities have already been fully evaluated for impacts related land use and planning from well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities Area would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for land use, agriculture, or forest resources. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Marine Biological Resources

The Injection Well Facilities Areas is not located within proximity to marine biological resources and the proposed Deep Injection Well #6 Changes would not result in any operational changes to the advanced water treatment facility compared to the operations that were analyzed in the 2021 Certified SEIR. No further discussion is included because there would be no impact to this resource associated with the proposed Deep Injection Well #6 Changes.

Noise and Vibration

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for noise and vibration. The proposed Deep Injection Well #6 Changes would be constructed within the same Injection Well Facility Areas that were analyzed in the 2021 Certified SEIR.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

All the impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact resulting from noise and vibration during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. Therefore, the relocation would not result in an increase in the intensity or duration of noise during construction or operation compared to what was evaluated in the 2021 Certified SEIR. In addition, Well Site #7 is located to the east of Well Site #1, which is farther away from the sensitive receptors located to the west of General Jim Moore Boulevard that were identified in the 2021 Certified SEIR
- 2) *Extension of Pipeline:* The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 is within the previously evaluated Injection Well Facilities Area. Once operational, the pipeline would not generate any noise or vibration.
- 3) *Relocation of Approved Backflush Basin:* The backflush basin will would be relocated from between Well Site #5 and Well Site #6 to between Well Site #6 and Well Site #7. Noise and vibration impact associated with construction and operation of a backflush basin were previously evaluated in the 2021 Certified SEIR. The relocation of the backflush basin would not change the conclusion of those impacts.

Duration of the temporary construction noise would not be increased at any of the well construction sites; thus, construction noise impacts would remain the same with the proposed Deep Injection Well #6 Changes. The nine injection wells and related facilities have already been fully evaluated for impacts related noise and vibration from well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. Impacts from operational noise would not increase compared to the results of the noise

evaluation in the 2021 Certified SEIR; furthermore, noise would not exceed noise level standards for any injection well sites. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect related to noise or vibration. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Population and Housing

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting related to population and housing.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the overall project, related to:

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

These impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impact and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact related to population and housing during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. The proposed Deep Injection Well #6 Changes also do not propose to expand the Injection Well Facilities Area; therefore, no changes to population and housing would result.
- 2) *Extension of Pipeline:* The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 would not result in changes to population and housing as previously analyzed in the 2021 Certified SEIR.
- 3) *Relocation of Approved Backflush Basin:* The relocation of the backflush basin from between Well Sites #5 and #6 to between Wells Sites #6 and #7 would not result in any new impacts to population and housing.

The proposed Deep Injection Well #6 Changes would not result in additional short-term or long-term employment compared to the level identified in the in the PWM/GWR Project EIR and 2021 Certified SEIR. Further, the proposed Deep Injection Well #6 Changes would not change project yield, and therefore, would not change the potential for growth inducement compared to the potential for growth inducement

disclosed in the 2021 Certified SEIR. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect related to population and housing. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Public Services, Recreation, and Utilities

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for public services, recreation and utilities. The Injection Well Facilities Area would remain in the same general setting for public services, and utilities and under the same regulatory framework; therefore, the proposed Deep Injection Well #6 Changes would not result in any impact to recreational facilities, and no further discussion of recreational facilities is included.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

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

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impacts related to public services and utilities during construction and operation as was identified in the 2021 Final SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7*: The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. The proposed Deep Injection Well #6 Changes also do not propose to expand the Injection Well Facilities Area; therefore, no changes to public services or landfill capacity during construction or operation. would result.

- 2) *Extension of Pipeline*: The extension of a pipeline from to the southwest from Well Site #7 to Well Site #1 would not result in changes to public services or landfill capacity during construction or operation. as previously analyzed in the 2021 Certified SEIR.
- 3) *Relocation of Approved Backflush Basin*: The relocation of the backflush basin from between Well Sites #5 and #6 to between Wells Sites #6 and #7 would not result in any new impacts to public services or landfill capacity during construction or operation.

The original Injection Well Area was analyzed in the PWM/GWR Project EIR and the Expanded Well Facilities area were analyzed in the 2021 Certified SEIR. Further, the nine injection wells have already been fully evaluated for impacts to public services and utilities due to well construction and operation in the PWM/GWR Project EIR and 2021 Certified SEIR. The proposed Deep Injection Well #6 Changes include the same total number of wells, which would be located in the same general area as was previously analyzed in the 2021 Certified SEIR; therefore, there would not be an increase to the level of impact to public services or landfill capacity during construction or operation. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for public services, recreation, or utilities. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Traffic and Transportation

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for traffic and transportation. The location of these facilities would remain in the same general transportation setting and under the same regulatory framework.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

The 2021 Certified SEIR concluded these impacts would be reduced to a less-than-significant level with the implementation of:

- Mitigation Measure TR-3: Roadway Rehabilitation Program

Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

The proposed Deep Injection Well #6 Changes would result in the same level of impact to the transportation network during construction and operation as was identified in the 2021 Certified SEIR.

- 1) *Relocation of Approved Injection Well from Well Site #1 to Well Site #7:* The relocation of Deep Injection Well #6 from Well Site #1 to Well Site #7 would not change the number of wells proposed. Therefore, the amount of vehicle trips generated by the construction and operation of the relocated well would not change.
- 2) *Extension of Pipeline:* Extension of the pipeline from Well Site #7 to Well Site #1 would not have any addition impacts to traffic and transportation compared to what was evaluated in the 2021 Certified SEIR.
- 3) *Relocation of Approved Backflush Basin:* The relocation of the backflush basin from between Well Sites #5 and #6 to between Wells Sites #6 and #7 would not change the amount of traffic generated by construction and operation as compared to what was previously evaluated in the 2021 Certified SEIR.

The same amount of construction-related traffic would be needed as there is no change in the total number of wells to be constructed. Construction traffic routes and temporary impacts from traffic during construction and operation would be the same, as the wells would be located in the same areas as previously analyzed in the PWM/GWR Project EIR and 2021 Certified SEIR. Mitigation measures applicable to the Injection Well Facilities would be applicable to the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect for traffic and transportation. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

Water Supply and Wastewater Systems

Environmental and Regulatory Setting

The proposed Deep Injection Well #6 Changes would not necessitate modifications to the environmental and regulatory setting for water supply and wastewater systems. The location, operation and management of these systems and supply facilities would continue under the same regulatory framework and the environmental setting provided in the 2021 Certified SEIR.

2021 Certified SEIR Summary and Findings

The 2021 Certified SEIR identified potentially significant impacts resulting from the construction and operation of the Injection Well Facilities related to:

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

All the impacts above were identified as less-than-significant. The 2021 Certified SEIR did not include any additional mitigation measures. Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis.

Environmental Analysis of Changes since Certification of SEIR

No changes to the environmental analysis would occur due to the proposed Deep Injection Well #6 Changes. The proposed Deep Injection Well #6 Changes do not include an increase in the total number of injection wells, construction-related water demand and wastewater generation would be the same as previously disclosed in the 2021 Certified SEIR. The nine injection wells and related facilities have already been fully evaluated for impacts related to water supply in the PWM/GWR Project EIR and 2021 Certified SEIR. Operational water supply would also remain the same as previously disclosed in the 2021 Certified SEIR because the volumes needed to operate the Exp. PWM/GWR Project facilities would not change as a result of the proposed Deep Injection Well #6 Changes. See **Appendix B** of this analysis for more information. In conclusion, the proposed project modifications would not: 1) result in any new significant environmental effects; or 2) substantially increase the severity of a previously identified significant effect related to water supply and wastewater systems. The findings of the existing environmental documentation would remain unchanged and no new or substantially revised mitigation measures are warranted.

Conclusion

The proposed Deep Injection Well #6 Changes would not result in any new significant impacts or worsen the severity of any significant impacts previously identified in the 2021 Certified SEIR.

VII. CUMULATIVE IMPACTS ANALYSIS

2021 Certified SEIR Summary and Findings

Cumulative Impacts and mitigation measures previously identified in the PWM/GWR Project EIR and in the 2021 Certified SEIR are summarized in **Appendix B** of this analysis. **Table 2** in **Appendix B** provides a summary of the cumulative impacts and the proposed Deep Injection Well #6 Changes contribution to those impacts, as applicable. The 2021 Certified SEIR found that the Proposed Modifications associated with the Exp. PWM/GWR Project would not cause the PWM/GWR Project to make a cumulatively considerable contribution to significant cumulative construction or operational impacts in all issue areas. Under Air Quality and GHG, the 2021 Certified SEIR found that the total GHG emissions from the PWM/GWR Project with the Proposed Modifications, including the CalAm components, would not make a cumulatively considerable contribution to significant cumulative impacts associated with GHG emissions and the effects of climate change. The 2021 Certified SEIR concludes “The Proposed Modifications would potentially make a considerable contribution to significant cumulative regional emissions of PM10; however, with implementation of Mitigation Measure AQ-1, the impact would be reduced to less than significant.”

Environmental Analysis of Changes since Certification of 2021 SEIR

No changes to the conclusions of the cumulative impact analysis would occur due to the proposed Deep Injection Well #6 Changes. Because the proposed Deep Injection Well #6 Changes would not increase the extent or intensity of any construction or operational activities, there would be no increase to the severity of any cumulative impacts, nor would there be any new cumulative impacts as described in the discussions

for each environmental topic section, as stated in the analysis above. As described above, the proposed Deep Injection Well #6 Changes would not result in any new significant cumulative impacts or worsen the severity of any significant cumulative impacts previously identified in the 2021 Certified SEIR.

VIII. REFERENCES

- Denise Duffy and Associates, 2004. Final Environmental Impact Report Regional Urban Water Augmentation Project. June 2014.
- Denise Duffy and Associates, 2006a. Addendum No. 1 to the Environmental Impact Report for the Regional Urban Water Augmentation Project. October 2006.
- Denise Duffy and Associates, 2007. Addendum No. 2 to the Environmental Impact Report for the Regional Urban Water Augmentation Project. February 2007.
- Denise Duffy and Associates, 2017. Addendum No. 2 to the Environmental Impact Report for the Regional Urban Water Augmentation Project. February 2017.
- Denise Duffy and Associates, 2015b. Pure Water Monterey Groundwater Replenishment Project Final Environmental Impact Report. <http://purewatermonterey.org/reports-docs/cfeir>
- Denise Duffy and Associates, 2016a. Addendum No. 1 to the Pure Water Monterey Groundwater Replenishment Project EIR for the Hilby Avenue Pump Station. June 2016.
- Denise Duffy and Associates, 2017a. Addendum No. 2 to the Pure Water Monterey Groundwater Replenishment Project EIR. February 2017.
- Denise Duffy and Associates, 2017b. Addendum No. 3 to the Pure Water Monterey Groundwater Replenishment Project EIR and Addendum No. 3 to the Environmental Impact Report for the Regional Urban Water Augmentation Project, October 2017.

IX. ADDENDUM PREPARERS, AGENCIES AND PERSONS CONSULTED

Agencies

Lead Agency: Monterey One Water

- Alison Imamura, P.E., AICP, Principal Engineer

Partner Agency: Monterey Peninsula Water Management District

Environmental Consultants

Denise Duffy & Associates

Diana Staines, AICP, Deputy Project Manager
Matt Johnson, Senior Environmental Scientist

Technical Engineers and Consultants

Larry Walker Associates

- Denise H. Conners, Associate

Perkins Coie

- Barbara J. Schussman, Partner
- Laura Zagar, Partner

Kennedy/Jenks Consultants

- Todd Reynolds, P.E., Vice President, Water Practice Leader

Todd Groundwater

- Edwin Lin, PG, CHG

Montgomery & Associates

- Pascual Benito, Ph.D., Senior Hydrogeologist

APPENDIX A

Federal Environmental Consultation Project Description

This page is intentionally blank.

PROJECT DESCRIPTION FOR FEDERAL CONSULTATION

EXPANDED PURE WATER MONTEREY

GROUNDWATER REPLENISHMENT PROJECT

TABLE OF CONTENTS

| | |
|---|----|
| 1. Introduction | 1 |
| 1.1 Overview of the Original PWM/GWR Project | 1 |
| 1.2 Overview of Addenda to the PWM/GWR Environmental Impact Report..... | 2 |
| 1.3 Overview of Supplemental Environmental Impact Report for the Expanded Capacity PWM/GWR Project..... | 5 |
| 2. Prior Federal Consultation and Environmental Review | 5 |
| 2.1 Consultation Under Section 7 of the Endangered Species Act with the U.S. Fish and Wildlife Service..... | 6 |
| 2.2 Consultation Under Section 106 of the National Historic Preservation Act with the State Historic Preservation Officer | 6 |
| 3. Overview of Existing Systems..... | 7 |
| 4. Description of the Expanded Capacity PWM/GWR Project..... | 7 |
| 4.1 Location of Specified Components of the Expanded Capacity PWM/GWR Project | 8 |
| 4.2 Objectives of the Expanded Capacity PWM/GWR Project | 8 |
| 4.3 Specified Components of the Expanded PWM/GWR Project | 8 |
| 4.3.1 Product Water Conveyance Facilities | 8 |
| 4.3.2 Injection Well Facilities | 11 |
| 5. References..... | 17 |

TABLES

| | |
|--|----|
| 1. Nomenclature Summary | 1 |
| 2. Injection Well Site Summary | 11 |
| 3. Expanded Injection Flows, Including Drought Reserve | 16 |

FIGURES

| | |
|--|----|
| 1. Original PWM/GWR Project..... | 3 |
| 2. Expanded Capacity PWM/GWR Project | 4 |
| 3. Product Water Conveyance Facilities | 9 |
| 4. Injection Well Facilities..... | 12 |
| 5. Conceptual Design Profile for Deep Injection Well | 14 |

LIST OF ACRONYMS

| Acronym or Abbreviation | Definition |
|--------------------------------|--|
| AF | Acre-feet |
| AFY | Acre-feet per year |
| APE | Area of Potential Effect |
| AWPF | Advanced Water Purification Facility |
| CalAm | California American Water |
| CFEIR | Consolidated Final Environmental Impact Report |
| CFR | Code of Federal Regulations |
| CPCN | Certificate of Public Convenience and Necessity |
| CPUC | California Public Utilities Commission |
| CSIP | Castroville Seawater Intrusion Project |
| EA | Environmental Assessment |
| EIR/EIS | Environmental Impact Report/Environmental Impact Statement |
| ESA | Endangered Species Act |
| Exp. PWM/GWR Project | Expanded Pure Water Monterey Groundwater Replenishment Project |
| Final EIR | Final Environmental Impact Report |
| Final SEIR | Final Supplemental Environmental Impact Report |
| M1W | Monterey One Water |
| MCWD | Marina Coast Water District |
| mgd | Million gallons per day |
| MPWMD | Monterey Peninsula Water Management District |
| MPWSP | Monterey Peninsula Water Supply Project |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| RUWAP | Regional Urban Water Augmentation Project |
| SCADA | Supervisory Control and Data Acquisition |
| SHPO | State Historic Preservation Act |
| SWRCB | State Water Resources Control Board |
| USFWS | U.S. Fish and Wildlife Service |

1. INTRODUCTION

This project description has been adapted from the Final Supplemental Environmental Impact Report (Final SEIR) for the Expanded Pure Water Monterey Groundwater Replenishment Project (Exp. PWM/GWR Project) and is intended to support the federal consultation process. Specifically, it will facilitate consultation with U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (ESA) and consultation with the State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act (NHPA). 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**, below provides a summary of the nomenclature used in this Project Description to describe the PWM/GWR Project.

Table 1
Nomenclature Summary

| Name | Acronym | Description |
|---|---|--|
| Original Pure Water Monterey Groundwater Replenishment Project | Approved PWM/GWR Project | This term is used to refer to the original project that was analyzed in a Consolidated Final Environmental Impact Report and approved by the M1W Board of Directors 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 and certified by the M1W Board of Directors 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 is used to describe certain components of the Exp. PWM/GWR Project for which M1W must update its federal consultation under the Endangered Species Act and the National Historic Preservation Act. These components include the Injection Well Facilities as described in the Environmental Memorandum approved with the Supplemental Environmental Impact Report, dated April 12, 2021, and the Product Water Conveyance Facilities as described in the Supplemental Environmental Impact Report. These components are the subject of this Project Description. |

Monterey One Water (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 State Revolving Fund. The State Revolving Fund is administered by the State Water Resources Control Board (SWRCB). The Specified Components of the Exp. PWM/GWR Project include the following facilities:

- Product Water Conveyance Facilities, and
- Injection Well Facilities.

1.1 Overview of the Original PWM/GWR Project

On October 8, 2015, the Board of Directors of M1W approved the Original PWM/GWR Project and certified the Final Environmental Impact Report (Final 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)¹ 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 California American Water's (CalAm's) water supply as required by SWRCB orders. The Original PWM/GWR 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.² 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.

1.2 Overview of Addenda to the PWM/GWR Environmental Impact Report

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.

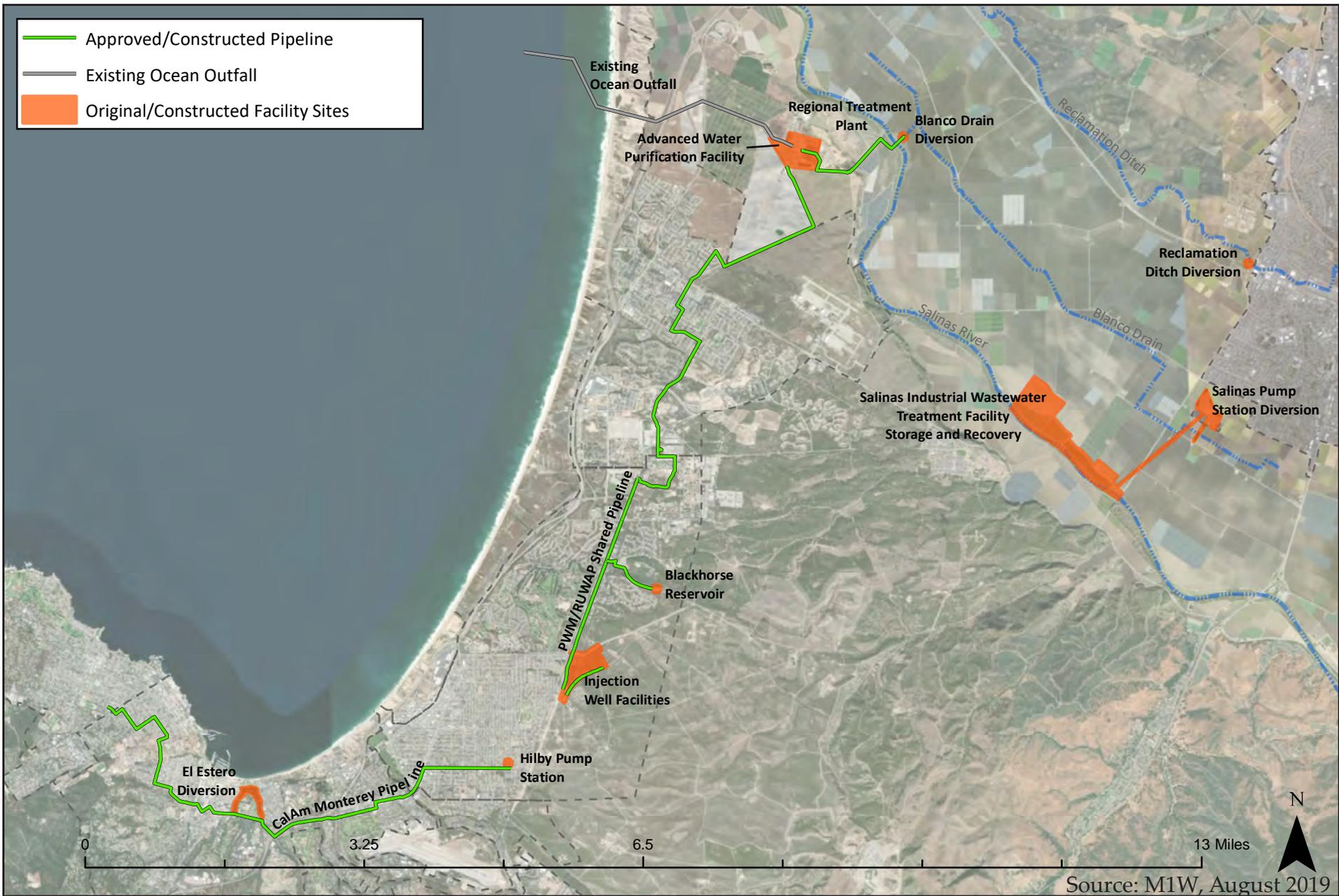
On October 30, 2017, the M1W Board of Directors approved Addendum No. 3 to the CFEIR. Addendum No. 3 covered additional modifications to the Original PWM/GWR Project to increase the operational capacity (peak or maximum product water flowrate) of the approved AWPF from 4.0 mgd to 5.0 mgd to enable the 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 of Directors 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

An additional Addendum (Addendum No. 4) is currently in progress to change the Expanded 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 Supplemental EIR as certified in April 2021, see **Figure 2**

¹ The RUWAP is a recycled water project developed by MCWD in cooperation with M1W. RUWAP was originally developed to help MCWD meet the overall needs of its service area, delivering tertiary-treated and disinfected recycled water produced at the existing Salinas Valley Reclamation Plant to urban users in the MCWD service area and former Fort Ord.

² The approved PWM/GWR Project also includes a drought reserve component to support crop irrigation during dry years. Under this component, an extra 200 AFY of purified recycled water will be injected in the Seaside Groundwater Basin during normal and, 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.

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

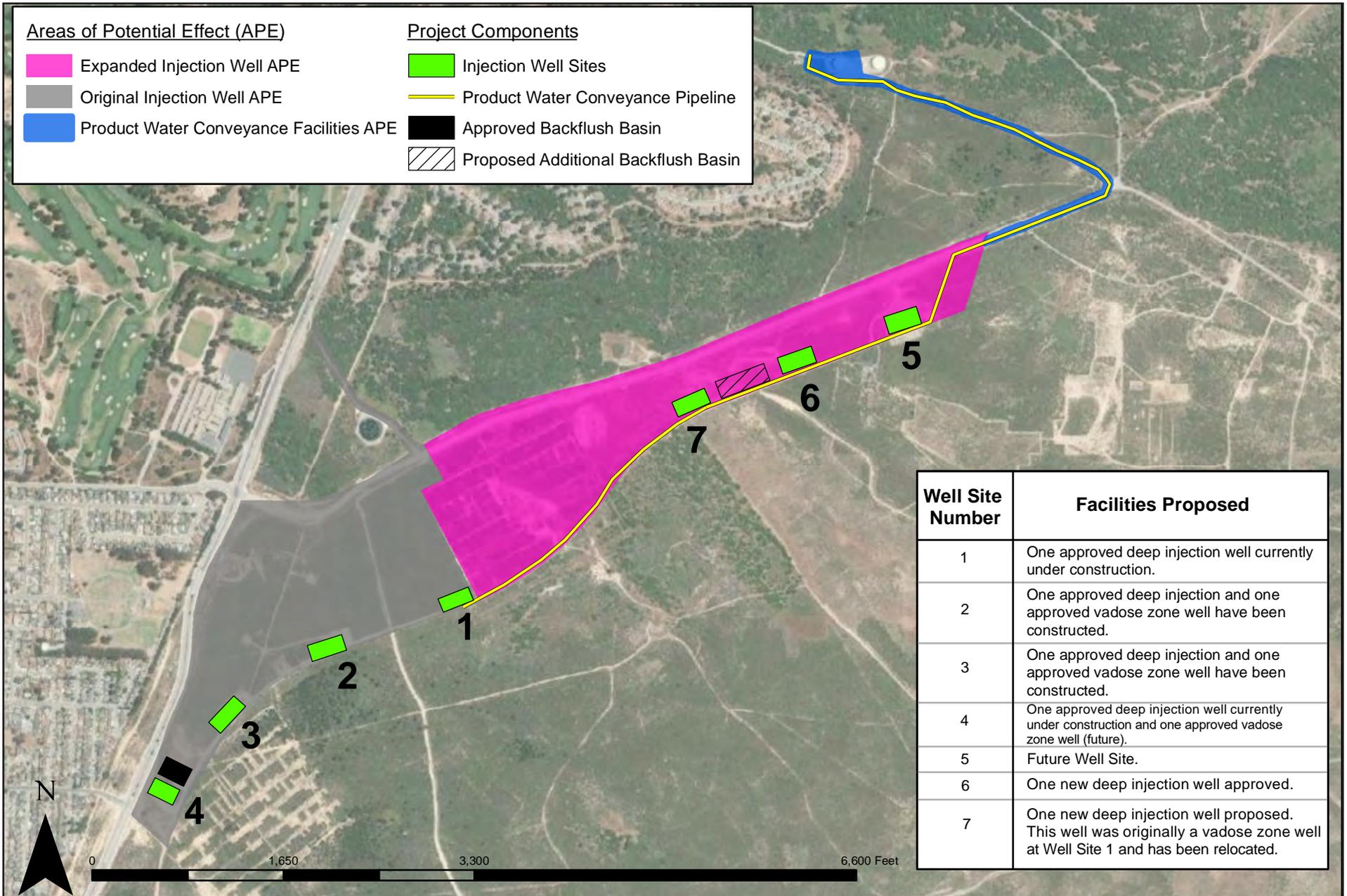


Original PWM/GWR Project

September 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
1



Expanded PWM/GWR Project

September 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
2

1.3 Overview of Supplemental Environmental Impact Report for the Expanded Capacity PWM/GWR Project

The Draft 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 of Directors 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 Board of Directors did not act to certify the Final SEIR nor to approve the Exp. PWM/GWR Project. At the February 22, 2021 Board meeting, the 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 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 Board for consideration at a future meeting. On April 26, 2021, the M1W Board of Directors 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 Consolidated Final EIR for the PWM/GWR Project (“CFEIR”), associated Addenda, and Final SEIR are accessible online at <http://purewatermonterey.org/reports-docs/cfeir/>.

2. PRIOR FEDERAL CONSULTATION AND ENVIRONMENTAL REVIEW

The CFEIR provides the background of the Original PWM/GWR Project as approved in 2015 (see Section 2.3 at pg. 2-6). Refer to the CFEIR for detailed requirements of the SWRCB orders affecting pumping from the Carmel River and of the court-ordered adjudication of Seaside Groundwater Basin; existing recycled water projects; and descriptions of key stakeholder agencies, including the project proponents. The following sections provide a brief updated discussion of the background related to prior federal consultation and environmental review processes.

In 2016 the SWRCB⁴, conducted consultation with the USFWS and the SHPO; these consultations are described below. In addition, the SWRCB also consulted with the National Marine Fisheries Service (NMFS) under Section 7 of the ESA, however, that consultation is not relevant to the Exp. PWM/GWR Project and therefore is not included below. Successful completion of the above consultations enabled M1W to apply for and receive funding from the State Revolving Fund for the Original PWM/GWR Project.

In addition, the 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 also prepared an EA and adopted a FONSI in April 2019 to comply with the National Environmental Policy Act (NEPA) for their authorization of M1W’s National Pollutant Discharge Elimination System (NPDES) permit amendment in December 2018.

⁴ The Environmental Protection Agency (EPA) was the federal lead for this consultation process. The EPA delegated certain authority to the SWRCB.

2.1 Consultation Under Section 7 of the Endangered Species Act with the U.S. Fish and Wildlife Service

A Biological Assessment was submitted to the USFWS on May 18, 2016. Supplemental information including additional survey results were submitted to the USFWS on June 23, 2016 and August 16, 2016. The USFWS issued a Biological Opinion (2016-F-0523) on December 20, 2016. The Biological Opinion made the following conclusions.

California Red-legged Frog

The Original PWM/GWR Project may result in mortality of a few adult or juvenile California red-legged frogs. The USFWS expects minimal effects to the quality of California red-legged frog habitat because most of the Original PWM/GWR Project would be implemented in existing developed or highly disturbed areas. The USFWS expects little to no long-term effect to the local population of California red-legged frogs. In addition, the USFWS 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 19.⁵

Monterey Spineflower

The USFWS expects that the Original PWM/GWR Project would result in destruction of up to 0.3-acres of known occupied Monterey spineflower habitat and possibly additional habitat occupied by seed. At least 0.1-acres of this habitat would either be avoided or replaced. Habitat that would not necessarily be either avoided or replaced occurs within designated development parcels of the former Fort Ord and is not considered essential to conservation of the species. The USFWS 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 USFWS expects that the Original PWM/GWR Project would result in destruction of up to 0.003-acres of known occupied Monterey gilia habitat and possibly additional habitat occupied by seed. Based on 2016 surveys, the USFWS estimates that approximately 87 adult plants may be killed, but because Monterey gilia is an annual, 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 (Corps 1997). The USFWS does not expect that the small amount of habitat destruction and mortality likely due to the proposed action would have substantial effects to recovery of the species.

2.2 Consultation Under Section 106 of the National Historic Preservation Act with the State Historic Preservation Officer

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 Letter of Concurrence made the following conclusions:

⁵ 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 the California red-legged frog (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.

- The SHPO does not object to M1W's identification and delineation of the Area of Potential Effect (APE), pursuant to 36 Code of Federal Regulations (CFR) Parts 800.4(a)(1) and 800.16(d);
- The SHPO agrees with M1W's decision to conduct the Original PWM/GWR Project in accordance with the Mitigation Measures CR-2b and CR-2c⁶; and
- The SHPO does not object to M1W's determination of No Historic Properties Affected for the Original PWM/GWR Project.

The Bureau of Reclamation undertook consultation with the SHPO during preparation of their EA. The SHPO issued concurrence on September 12, 2016 and added mitigation measures⁷ to the project.

The Office of Marine Sanctuaries did not consult with the SHPO during preparation of their EA because the EA was limited to the ocean discharge and potential marine impacts. It was therefore determined that the undertaking was not likely to adversely affect historic properties; no consultation was initiated.

The SWRCB entered into consultation with SHPO again in 2018 due to modifications to the APE resulting from changes made to the design of one component of the project. The SHPO issued a Continuation of Section 106 Compliance Letter on February 28, 2018. The Continuation Letter made the following conclusions:

- 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.

3. OVERVIEW OF EXISTING SYSTEMS

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, 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.

4. DESCRIPTION OF THE EXPANDED CAPACITY PWM/GWR PROJECT

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), see **Figure 2**.

⁶ The full text of these mitigation can be found in the Mitigation Monitoring and Reporting Project for the Original PWM/GWR Project.

⁷ Mitigation Measure CR-2b – Discovery of Archaeological Resources or Human Remains and Mitigation Measure CR-2c – Native American Notification were added to the project.

4.1 Location of Specified Components of the Expanded Capacity PWM/GWR Project

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

4.2 Objectives of the Expanded Capacity PWM/GWR Project

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

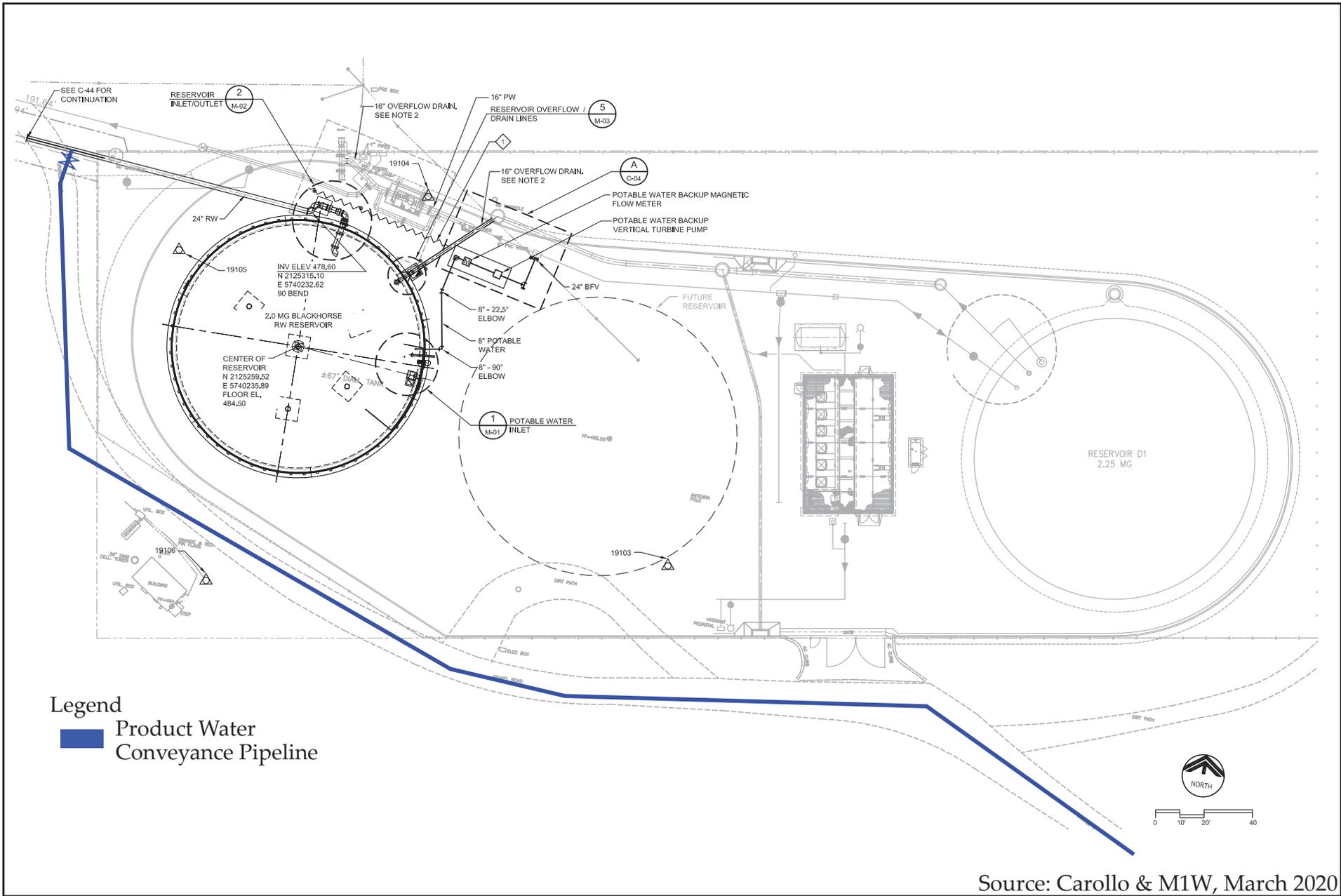
1. Be capable of commencing operation, or of being substantially complete, by the end of 2023 or as necessary to meet CalAm's replacement water needs;
2. Be cost-effective such that the Exp. PWM/GWR Project would be capable of supplying reasonably priced water; and
3. Be capable of complying with applicable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

4.3 Specified Components of the Expanded PWM/GWR Project

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.

4.3.1 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 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, and 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 (nominal inner diameter). An additional 2,000 feet of pipeline for backflushing wells also be located generally along the same alignment as the product water pipeline between Well Site #5 and Well Site #7.



Source: Carollo & M1W, March 2020

Product Water Conveyance Facilities

September 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
3

The existing Blackhorse Reservoir and the product water conveyance pipeline from the reservoir site to the Expanded Injection Well Area will be owned by MCWD and 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 approved and proposed deep injection wells.

Construction

The product water conveyance pipeline would be constructed using open trench methods, except for a portion of the segment of pipeline between Well Sites #1 and #7 which will be built using a horizontal directional drilling technique.⁸ The construction sequence would typically include clearing and grading the ground surface along the pipeline alignment; excavating the trench; shoring, if required; preparing and installing pipeline sections; installing vaults, manhole risers, manifolds, and other pipeline components; backfilling the trench with non-expansive fills; restoring preconstruction contours; and revegetating or paving the pipeline alignments, as appropriate. A conventional backhoe, excavator, or other mechanized equipment would be used to excavate trenches. The typical trench width would be six feet; however, vaults, manhole risers, and other pipeline components could require wider excavations. In addition, the project construction area is underlain by sandy soils that may require a laid-back trench cross-section due to considerations such as duration of construction, efficiency, and safety. In these cases, trench widths may be up to 12 feet wide. Work crews would install trench boxes, or shoring, or would lay back and bench the slopes to stabilize the pipeline trenches and prevent the walls from collapsing during construction. After excavating the trenches, the contractor would line the trench with pipe bedding (sand or other appropriate material shaped to support the pipeline). Construction workers would then place pipe sections (and pipeline components, where applicable) into the trench, connect the sections together by welding or other applicable joining methods as trenching proceeds, and then backfill the trench. Most pipeline segments would have four to five feet of cover. Open-trench construction would generally proceed at a rate of about 150 to 250 feet per day. Steel plates would be placed over trenches to maintain access during construction.

Operation and Maintenance

The proposed product water conveyance pipeline could operate continuously for up to 24 hours a day. General operations and maintenance activities associated with pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when

⁸ 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.

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).

4.3.2 Injection Well Facilities

As of 2021 M1W and MPWMD have begun 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 (DIW-3) is being constructed at the northernmost well site (Well Site #1) and the fourth deep injection well (DIW-4) is being constructed at the southernmost well site (Well Site #4). No additional approved vadose zone wells are under construction; therefore, six of the eight approved wells will be operational within the next year.

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). One new deep injection well would be constructed and operated at Well Site #6 and a replacement deep injection well is currently proposed at Well Site #7. The injection well at Well Site #7 is under CEQA review (Addendum No. 4 to the CFEIR). No new vadose zone wells are proposed as part of the Exp. PWM/GWR Project.⁹

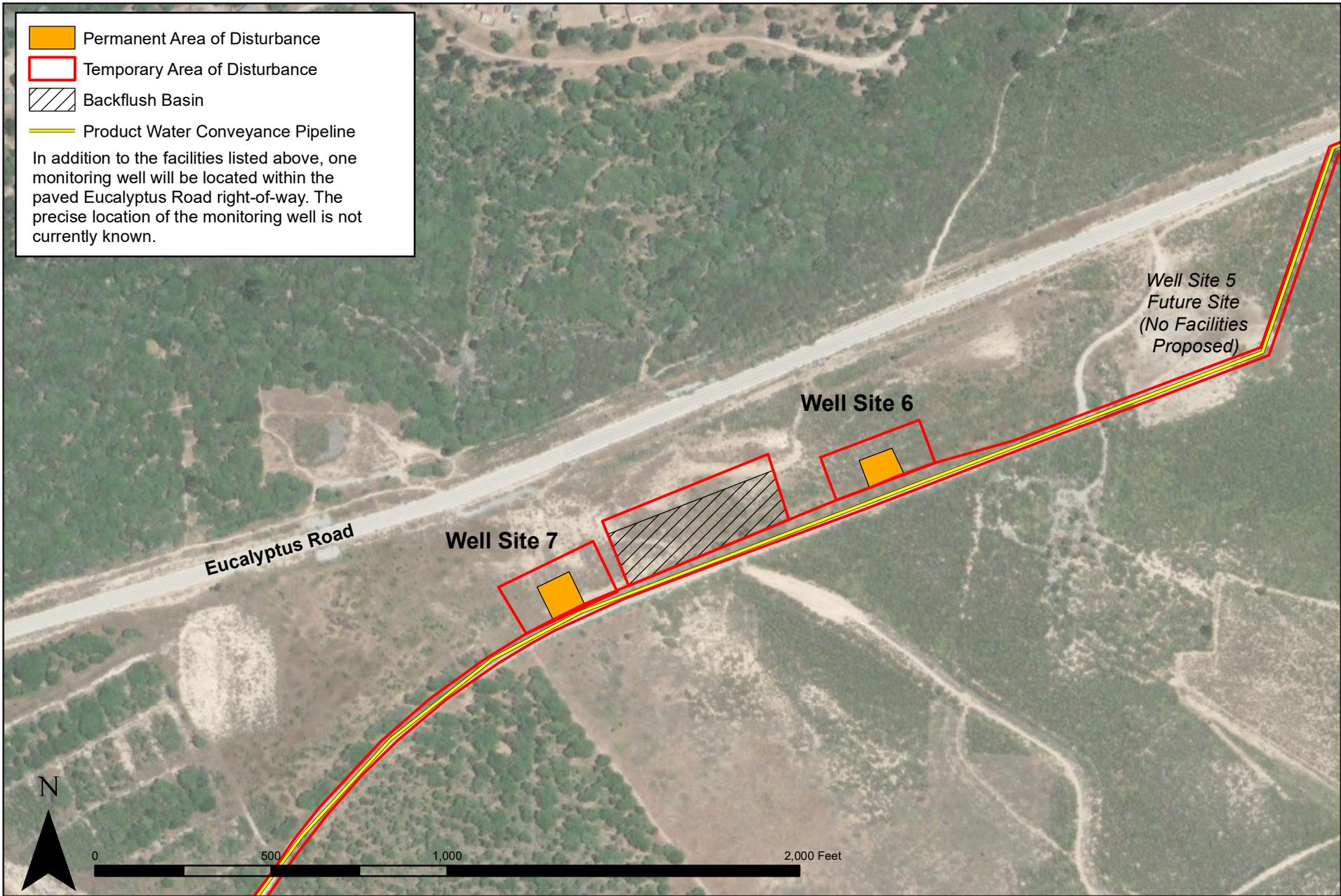
Table 2 and **Figure 4** summarize the Injection Well at each of the Well Sites.

Table 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 and 1 vadose zone well have been approved and the deep injection well is under construction. |
| #2 | Approved Injection Well Facilities Area | 1 deep injection well and 1 vadose zone well have been approved and constructed. |
| #3 | Approved Injection Well Facilities Area | 1 deep injection well and 1 vadose zone well have been approved and constructed. |
| #4 | Approved Injection Well Facilities Area | 1 deep injection well and 1 vadose zone well have been approved and the deep injection well is under construction. |
| #5 | Expanded Injection Well Area | Well Site #5 is a potential site for a future new deep well to replace an injection well; however, no replacement well is proposed for approval as part of this project. |
| #6 | Expanded Injection Well Area | 1 newly proposed deep injection well |
| #7 | Expanded Injection Well Area | 1 relocated well is proposed. The approved vadose zone well from Well Site #1 will be relocated to Well Site #7 as a 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.

⁹ 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 Facilities

September 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure

4

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.

One monitoring well will be installed within the paved right-of-way of Eucalyptus Road if required by the SWRCB Department of Drinking Water (DDW). The monitoring well will not require any above ground infrastructure besides an approximate 12-inch diameter manhole cover. The monitoring well will extend as far as 1,000 feet below ground surface.

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

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 and have not changed since the certification of the Original PWM/GWR Project Final EIR.

Well Construction

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

Drilling, Logging, and Installation

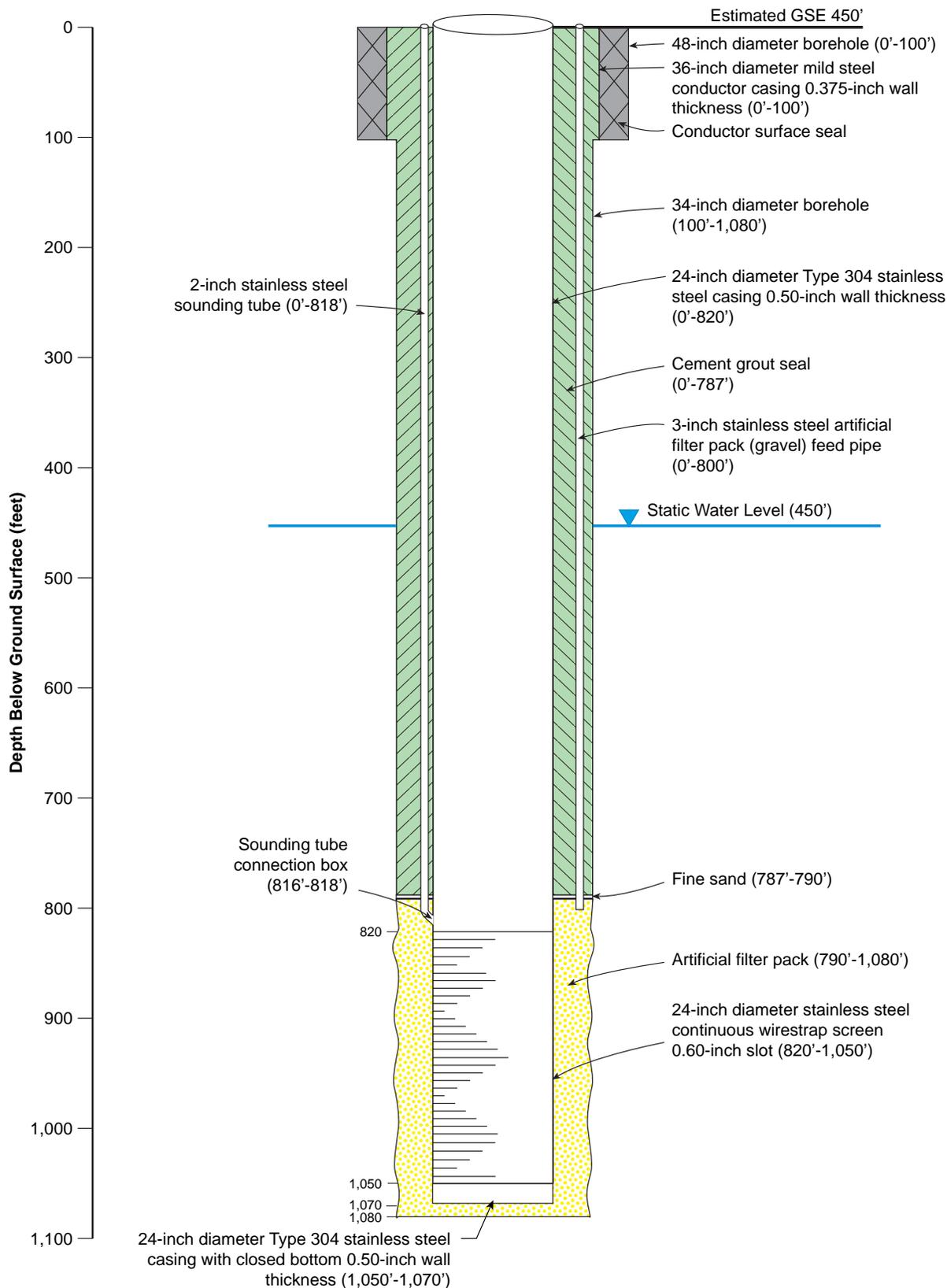
The deep injection wells would be drilled with rotary drilling methods. The method would be customized to minimize borehole impacts from drilling fluids and may incorporate air rotary methods or specialized drilling fluids (such as polymers). Cuttings from the borehole would be logged by a California 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 State Board - Division of Drinking Water regulations and recommendations contained in the Engineering Report prepared for well construction, as well as ambient groundwater quality in the Santa Margarita aquifer in the area.

Deep Well at Well Sites #6 and #7



Source: Todd Groundwater, October 2019

Conceptual Design Profile for Deep Injection Well

September 2021

Expanded PWM/GWR Project
Project Description for Federal Consultation

Figure
5

Backflush Pipeline Facilities Construction

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

Estimated construction time for this component is approximately four months. The temporary construction area along the alignment of the 14-inch diameter backflush water pipeline would be approximately 25 to 50 feet wide, for its approximate 2,000-foot length. Hence, the ground surface disturbance area would be 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 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**. 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 PG&E power supply. In addition to incidental power requirements (instrumentation and monitoring equipment, site lighting, etc.), major power supply would be required to drive one pump motor at a time for backflushing the deep wells. The following activities would be required to construct the pump motor control and electrical conveyance facilities:

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, construct block walls, doors, louvers, roof and appurtenances, then interior finishes, lighting and HVAC; and electrical equipment and wiring.

The estimated construction period for these facilities is approximately 6 months. The temporary construction area would be approximately 25 to 50 feet wide within the alignment of the 14-inch

diameter backflush water pipeline. There would be no additional surface disturbance for construction of electrical conduits beyond that for the 14-inch backflush water pipeline. Construction activities would include installation of a buried electrical power conduit and instrumentation conduits, all of which would be underground and encased in a concrete 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. Injection volumes and flowrates by month are provided in **Table 3**.

Table 3

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

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

Injection wells and associated electrical and mechanical systems would operate 24 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 about four hours weekly and would require discharge of the backflush water to the percolation basin. M1W will conduct backflushing and visual checks of the backflush water discharge to confirm adequate flushing time has been provided. Approximately once per year, a diking machine would be used to scarify the bottom of the pond to increase/restore the percolation rate.

Monitoring wells would be used to monitor project performance and compliance with 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).

5. REFERENCES

- Department of Parks and Recreation Office of Historic Preservation, 2016. *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 Project No. C-06-8028-110*, April 19, 2016.
- Department of Parks and Recreation Office of Historic Preservation, 2018. *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*, February 28, 2018.
- Monterey One Water, 2016. *Consolidated Final Environmental Impact Report for the Pure Water Monterey Groundwater Replenishment Project*, January 2016. Accessed at <https://purewatermonterey.org/wp/wp-content/uploads/Volume-I-Consolidated-Final-EIR-Jan-2016.pdf> on August 24, 2021.
- Monterey One Water, 2017. *Addendum No. 3 to the Pure Water Monterey/Groundwater Replenishment Project Environmental Impact Report*, October 2017. Accessed at <https://purewatermonterey.org/wp/wp-content/uploads/EIR-Addendum-NPDES-10-24-2017.pdf> on August 24, 2021.
- Monterey One Water, 2019. *Environmental Assessment for the Authorization of the National Pollutant Discharge Elimination System Permit for the Monterey One Water Regional Wastewater Treatment Plant and Advanced Water Purification Facilities*, March 2019. Accessed at https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/resourcepro/resmanissues/desal_projects/pdf/190329m1w-pwm_ea-final.pdf on August 24, 2021.
- Monterey One Water, 2020. *Final Supplemental Environmental Impact Report for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project*, April 2020. Accessed at <https://purewatermonterey.org/wp/wp-content/uploads/Final-SEIR-Proposed-Modifications-PWM-GWR-Project-April-2020.pdf> on August 24, 2021.
- Monterey One Water, 2021. Board of Directors Meeting Staff Report dated April 26, 2021. *Environmental Analysis of the 2021 Changes to the Expanded Pure Water Monterey Groundwater Replenishment Project*, April 2021. Accessed at <https://purewatermonterey.org/wp/wp-content/uploads/MOW-Staff-Report-04-26-2021.pdf> on August 24, 2021.
- Monterey Peninsula Water Management District, 2016. *Addendum to the Aquifer Storage and Recovery Project Environmental Impact Report/Environmental Assessment and the Pure Water Monterey Groundwater Replenishment Project Environmental Impact Report for the Hilby Avenue Pump Station*, June 2016. Access at <https://purewatermonterey.org/wp/wp-content/uploads/Addendum-No-1-to-the-PWM-EIR-6-14-16.pdf> on August 24, 2021.
- Monterey Peninsula Water Management District, 2017. *Addendum No. 3 to the Aquifer Storage and Recovery Project Environmental Impact Report/Environmental Assessment and Addendum No. 2 to the Pure Water Monterey Groundwater Replenishment Project Environmental Impact Report for the Monterey Pipeline*, February 2017. Accessed at <https://purewatermonterey.org/wp/wp-content/uploads/Addendum-No-2-to-the-PWM-EIR-Feb-2017.pdf> on August 24, 2021.
- U.S. Department of the Interior Bureau of Reclamation, 2017. *Environmental Assessment Pure Water Monterey Groundwater Replenishment Project – Monterey Regional Water*

Pollution Control Agency, May 2017. Accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=29001 on August 24, 2021.

U.S. Department of the Interior Fish and Wildlife Service, Ventura Fish and Wildlife Office, 2016. *Biological Opinion for the Pure Water Monterey Groundwater Replenishment Project, Monterey County, California*, December 20, 2016.

APPENDIX B

Summary of Impacts and Mitigation Measures

This page is intentionally blank.

EXHIBIT B.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1 Summary of Impacts and Mitigation Measures and **Table 2** Summary of Cumulative Impacts and Mitigation Measures list the impacts and mitigation measures of the Expanded Pure Water Monterey Groundwater Replenishment Project (Exp. PWM/GWR Project) and the proposed Deep Injection Well #6 Changes. This table has been updated from the Supplemental Environmental Impact Report for the Exp. PWM/GWR Project (2021 Certified SEIR) to include notes about the effects of the proposed Deep Injection Well #6 Changes. The proposed Deep Injection Well #6 Changes will not increase the severity of any previously identified significant impacts, nor would these changes result in any new significant impacts. In addition, the proposed Deep Injection Well #6 Changes would not result in any changes to the mitigation measures presented in the 2021 Certified SEIR.

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>AE-1: Construction Impacts on Scenic Views, Scenic Resources and Visual Quality of the Surrounding Areas. Construction of the Proposed Modifications would not result in substantial effects on scenic views, scenic resources, or the visual character or quality of public views of the areas surrounding the Proposed Modifications facilities.</p> | NI | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AE-2: Construction Impacts due to Temporary Light and Glare. Construction of the Proposed Modifications could result in substantial, temporary sources of light or glare.</p> | LS | NI | LS | LSM | LSM | LSM | AE-2: Minimize Construction Nighttime Lighting. (Applies to the CalAm Extraction Wells and Conveyance Pipelines). | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AE-3: Degradation of Visual Quality of Sites and Surrounding Areas. Proposed Modifications would not result in a substantial degradation of the visual character of the project area and its surroundings.</p> | LS | NI | LS | LSM | NI | LSM | AE-3: Provide Aesthetic Screening for New Above-Ground Structures. (Applies to the following project components: CalAm Extraction Wells). | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AE-4: Impacts due to Permanent Light and Glare during Operations. Operation of Proposed Modifications may result in a substantial new source of light or glare that would adversely affect day or nighttime views in the area.</p> | LS | NI | LSM | LSM | NI | LSM | AE-4: Exterior Lighting Minimization. (Applies to the following project components: Injection Well Facilities and CalAm Extraction Wells). | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure AE-4 would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|---|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>AQ-1: Construction Criteria Pollutant Emissions. Construction of the Proposed Modifications would result in emissions of criteria pollutants, specifically PM10, that may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard.</p> | LSM ¹ | LSM ¹ | LSM ¹ | LSM ¹ | LSM ¹ | LSM ¹ | AQ-1: Construction Fugitive Dust Control Plan. (Applies to All Proposed Modifications). | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure AQ-1 would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR. |
| <p>AQ-2: Construction Exposure of Sensitive Receptors to Pollutant Emissions. Construction of the Proposed Modifications would not expose sensitive receptors to substantial pollutant concentrations.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AQ-3: Construction Odors. Construction of the Proposed Modifications would not result in other emissions (e.g., odors) that would adversely affect a substantial number of people.</p> | LS | LS | LS | LS | LS | LS | None required | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AQ-4: Construction Greenhouse Gas Emissions. Construction of the Proposed Modifications would generate greenhouse gas emissions, either directly or indirectly, but would not cause the Project with the Proposed Modifications to make a</p> | <p>LS: The construction of the Proposed Modifications would not make a considerable contribution to significant cumulative impacts due to greenhouse gas emissions and the related global climate change impacts.</p> | | | | | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. | |

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

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|--|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>considerable contribution to significant cumulative impacts due to greenhouse gas emissions and the related global climate change impacts.</p> | | | | | | | | |
| <p>AQ-5: Operational Criteria Pollutant Emissions. Operation of the Project with the Proposed Modifications would not expose sensitive receptors to substantial pollutant concentrations.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>AQ-6: Operational Greenhouse Gas Emissions. Operation of the Proposed Modifications would generate GHG emissions, either directly or indirectly. These emissions would not cause the Project with the Proposed Modifications to exceed significance thresholds such that they would result in a considerable contribution to significant cumulative impacts of GHG emissions. In addition, the Proposed Modifications would not conflict with applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.</p> | <p>LS: The Proposed Modifications would not make a considerable contribution to significant cumulative impacts of greenhouse gas emissions and the related global climate change impacts</p> | | | | | | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>BF-1: Habitat Modification Due to Construction of Diversion Facilities.</p> | NI | NI | NI | NI | NI | NI | None required. | No impact would result from the proposed Deep Injection Well #6 Changes to the Injection Well Facilities. These impact conclusions remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>BF-2: Interference with Fish Migration Due to Project Operations.</p> | NI | NI | NI | NI | NI | NI | None required. | No impact would result from the proposed Deep Injection Well #6 Changes. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>BF-3: Reduction in Fish Habitat or Fish Populations Due to Project Operations.</p> | NI | NI | NI | NI | NI | BI | None required. | No impact would result from the proposed Deep Injection Well #6 Changes. These impact conclusions remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|---|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>BT-1: Construction Impacts to Special-Status Species and Habitat. Construction of the Proposed Modifications may adversely affect, either directly or through habitat modification, special-status plant and wildlife species and their habitat within the Biological Study Area.</p> | NI | LSM | LSM | NI | NI | LSM | <p>BT-1a: Implement Construction Best Management Practices. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)</p> <p>BT-1b: Implement Construction-Phase Monitoring. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)</p> <p>BT-1c: Implement Non-Native, Invasive Species Controls. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)</p> <p>BT-1d: Conduct Pre-Construction Surveys for California Legless Lizard. (Applies to Product Water Conveyance Pipelines, Injection Well Facilities, and Extraction Wells)</p> <p>BT-1e: Prepare and Implement Rare Plant Restoration Plan to Mitigate Impacts to Kellogg’s Horkelia. (Applies to Product Water Conveyance Pipeline and Injection Well Facilities)</p> <p>BT-1f: Conduct Pre-Construction Protocol-Level Botanical Surveys within the remaining portion of the Biological Study Area. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)</p> <p>BT-1h: Implementation of Mitigation Measures BT-1a and BT-1b to Mitigate Impacts to the Monterey Ornate Shrew, Coast Horned Lizard, Coast Range Newt, Two-Striped Garter Snake, and Salinas Harvest Mouse. (Applies to Injection Well Facilities and Extraction Wells)</p> <p>BT-1i: Conduct Pre-Construction Surveys for Monterey Dusky-Footed Woodrat. (Applies to Injection Well Facilities and Extraction Wells)</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measures BT-1a through BT-1m would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR.</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| | | | | | | | <p>BT-1j: Conduct Pre-Construction Surveys for American Badger. (Applies to Injection Well Facilities and Extraction Wells)</p> <p>BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark. (Applies to all Proposed Modifications, except the Advanced Water Purification Facility)</p> <p>BT-1m: Minimize effects of nighttime construction lighting. (Applies to Injection Well Facilities and Extraction Wells)</p> | |
| <p>BT-2: Construction Impacts to Sensitive Habitats. Proposed Modifications construction may adversely affect sensitive habitats (including riparian, wetlands, and/or other sensitive natural communities) within the Biological Study Area.</p> | NI | LS | LS | NI | NI | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|---|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>BT-3: Construction Conflicts with Local Policies, Ordinances, or Approved Habitat Conservation Plan. Construction of the Proposed Modifications would potentially conflict with local policies or ordinances protecting biological resources. A potential conflict may occur if the Fort Ord HMP plant species on the former Fort Ord that do not require a take authorization from the Service or CDFW are impacted, and salvage is not conducted. There are no approved HCPs applicable to the Proposed Modifications.</p> | NI | LSM | LSM | LSM | LSM | LSM | <p>BT-4: Fort Ord HMP Plant Species Salvage. (Applies to Product Water Conveyance Pipeline, Expanded Injection Well Facilities, Extraction Wells, and CalAm Conveyance Pipelines)</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure BT-4 would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR.</p> |
| <p>CR-1: Construction Impacts on Archaeological Resources or Human Remains. Construction of the Proposed Modifications may result in a substantial adverse change in the significance to unknown archaeological resources during construction and/or encounter unknown human remains.</p> | LSM | LSM | LSM | LSM | LSM | LSM | <p>CR-2b: Discovery of Archaeological Resources or Human Remains. (Applies to all Proposed Modifications components). CR-2c: Native American Notification (Applies to all Proposed Modifications)</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measures CR-2b and CR-2c would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR.</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|---|
| <i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i> | | | | | | | | |
| CR-2: Construction Impacts on Unknown Paleontological Resources. Construction of the Proposed Modifications would not result in damage to or destruction of unknown paleontological resources. | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| EN-1: Construction Impacts due to Temporary Energy Use. Proposed Project and Project Modifications construction could result in wasteful or inefficient use of energy if construction equipment is not maintained or if haul trips are not planned efficiently. The Proposed Project and Project Modifications would not conflict with existing energy standards. | LSM | LSM | LSM | LSM | LSM | LSM | EN-1: Construction Equipment Efficiency Plan. (Applies to all Proposed Modification components). | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure EN-1 would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR. |
| EN-2: Operational Impacts due to Energy Use. Proposed Project operations would not result in the consumption of energy such that existing supplies would be substantially constrained nor would the Project result in the unnecessary, wasteful, or inefficient use of energy resources. | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| GS-1: Construction-Related Erosion or Loss of Topsoil. Construction of the Proposed Modifications would not result in substantial soil erosion or the loss of topsoil. | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| GS-2: Construction-Related Soil Collapse and Soil Constraints during Pipeline Trenching. Construction of some Proposed | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>Modifications pipeline components would be located on geologic units or soils that are unstable, or that may become unstable during project construction, and potentially result in soil instability or collapse; however, this exposure would not result in a substantial risk to people or structures.</p> | | | | | | | | <p>of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>GS-3: Exposure to Seismic Ground Shaking and Liquefaction. The Proposed Modifications would be located in a seismically active area; however, operations of the Proposed Modifications would not expose people or structures to a substantial risk of loss, injury, or death involving exposure to seismic groundshaking and liquefaction.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>GS-4: Hydro-Collapse of Soils from Well Injection. Operation of the Proposed Modifications would not create a substantial risk to life or property due to its facilities being located on a geologic unit or soils that are unstable, or that would become unstable as a result of hydro-collapse.</p> | NI | NI | LS | NI | NI | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-1: Use and Disposal of Hazardous Materials During Construction. Construction of the Proposed Modifications would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-2: Accidental Release of Hazardous Materials During Construction. Construction of the Proposed Modifications</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>would not create a significant hazard due to upset and accident conditions involving the release of hazardous materials into the environment.</p> | | | | | | | | <p>of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-3: Construction of Facilities on Known Hazardous Materials Site. Construction of the Proposed Modifications would occur on a known hazardous materials site pursuant to Government Code Sec. 65962.5; however, the Proposed Modifications would not result in a significant hazard to people or the environment.</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-4: Use of Hazardous Materials During Construction Within 0.25-Miles of Schools. Construction of the Proposed Modifications would not result in nor create a significant hazard to the public or the environment due to handling of hazardous materials or hazardous emissions within 0.25 mile of a school during construction.</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-5: Wildland Fire Hazard during Construction. Construction of the Proposed Modifications would not increase the risk of wildland fires in high fire hazard areas.</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>HH-6: Use and Disposal of Hazardous Materials During Operation. Operations of the Proposed Modifications would not create a significant hazard to the public or the</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| environment through the routine transport, use, or disposal of hazardous materials. | | | | | | | | remain the same as in the 2021 Certified EIR. |
| <p>HH-7: Operation of Facilities on Known Hazardous Materials Site. Proposed Modifications facilities would be located on a known hazardous materials site; however, the Proposed Modifications would not result in a significant hazard to people or the environment.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>GW-1: Construction Groundwater Depletion, Levels, and Recharge. Construction of the Proposed Modifications components would not deplete groundwater supplies nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of local groundwater levels.</p> | NI | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>GW-2: Construction Groundwater Quality. Construction of the Proposed Modifications would not violate any water quality standards or otherwise degrade water quality.</p> | NI | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>GW-3: Operational Groundwater Depletion and Levels: Salinas Valley Groundwater Basin. Operation of the Project with the Proposed Modifications would not deplete groundwater supplies in the Salinas Valley Groundwater Basin nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the</p> | NI | NI | NI | NI | NI | BI | None required. | No impact would result from the proposed Deep Injection Well #6 Changes. These impact conclusions remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>local groundwater levels in the Salinas Valley Groundwater Basin.</p> | | | | | | | | |
| <p>GW-4: Operational Groundwater Depletion and Levels: Seaside Basin. Operation of the Project with the Proposed Modifications would not deplete groundwater supplies in the Seaside Basin nor interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater levels in the Seaside Basin.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>GW-5: Operational Groundwater Quality: Salinas Valley. Operation of the Proposed Project would not degrade groundwater quality in the Salinas Valley.</p> | NI | NI | NI | NI | NI | BI | None required. | No impact would result from the proposed Deep Injection Well #6 Changes. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>GW-6: Operational Groundwater Quality: Seaside Basin. Operations of the Project with the Proposed Modifications would not degrade groundwater quality in the Seaside Basin, including due to injection of purified recycled water into the basin.</p> | NI | NI | BI/LS ² | LS | LS | BI/LS ² | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>HS-1: Construction Impacts to Surface Water Quality due to Discharges. Construction of the Proposed Modifications involve well drilling and development. Dewatering of shallow groundwater during excavation would generate water requiring disposal. Compliance with existing regulatory requirements would ensure that water disposal during construction would not violate any water quality standards or waste discharge requirements or substantially degrade surface water quality, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |

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

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>HS-2: Construction Impacts to Surface Water Quality due to Earthmoving and Drainage Alterations. Construction of the Proposed Modifications would not violate any water quality standards or waste discharge requirements, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality including marine water quality, due to earthmoving, drainage alterations, and use of hazardous chemicals.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>HS-3: Operational Impacts to Surface Water Quality due to Well Maintenance Discharges. Operation of the Proposed Modifications would not violate any water quality standards or waste discharge requirements, would not cause substantial erosion or siltation, and would not otherwise substantially degrade surface water quality due to well maintenance discharges.</p> | NI | NI | LS | LS | NI | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>HS-4: Operational Marine Water Quality due to Ocean Discharges. The Proposed Modifications' operational discharges of reverse osmosis concentrate to the ocean through the M1W outfall would not violate water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.</p> | LS | NI | NI | NI | NI | LS | None required. | No impact would result from the proposed Deep Injection Well #6 Changes. These impact conclusions remain the same as in the 2021 Certified SEIR. |

Table 1. Summary of Impacts and Mitigation Measures

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

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|---|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>would not interfere substantially with the movement of any native resident or migratory fish or wildlife species.</p> | | | | | | | | <p>remain the same as in the 2021 Certified SEIR.</p> |
| <p>NV-1: Construction Noise. Construction would result in a temporary increase in ambient noise levels in the vicinity of all Proposed Modifications sites. Temporary construction noise would not be substantial at most construction sites, except at the CalAm Extraction Wells.</p> | LS | LSM | LS | SU | LSM | SU | <p>NV-1a: Drilling Contractor Noise Measures. (Applies to Expanded Injection Well Facilities, CalAm Extraction Wells) NV-1c: Neighborhood Notice. (Applies to Expanded Injection Well Facilities, CalAm Extraction Wells) NV-1e: Additional Noise Controls for Nighttime Construction of Wells. (Applies to CalAm Extraction Wells) NV-1f: Offsite Accommodations for Substantially Affected Nighttime Receptors near Wells. (Applies to CalAm Extraction Wells)</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions and associated mitigation measures remain the same as in the 2021 Certified SEIR.</p> |
| <p>NV-2: Operational Noise. Operation of the Proposed Modifications would potentially increase existing noise levels, but would not exceed noise level standards except at CalAm Extraction Wells.</p> | LS | LS | LS | LSM | LS | LSM | <p>NV-2: Stationary-Source Noise Controls. (EW-3 and EW-4)</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions and associated mitigation measure(s) remain the same as in the 2021 Certified SEIR.</p> |
| <p>PH-1: Construction-Related Growth Inducement. Construction of the Proposed Modifications would result in temporary increases in construction employment but would not induce substantial population growth.</p> | - | - | - | - | - | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions and associated mitigation measure(s) remain the same as in the 2021 Certified SEIR.</p> |
| <p>PH-2: Operations-Related Growth Inducement. Operation of the Proposed Modifications would not result in substantial</p> | - | - | - | - | - | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|---|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>population growth directly during project operations.</p> | | | | | | | | <p>of this impact. These impact conclusions and associated mitigation measure(s) remain the same as in the 2021 Certified SEIR.</p> |
| <p>PS-1: Construction Public Services Demand. Construction of the Proposed Modifications would not result in increased demands for fire and police protection services, schools, or parks that would result in the need for new or physically altered facilities to maintain service capacity or performance objectives.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>PS-2: Construction Landfill Capacity. Construction of the Proposed Modifications would result in generation of solid waste; however, the solid waste would be disposed at a landfill with sufficient permitted daily and overall capacity to accommodate the project's solid waste disposal needs.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>PS-3: Construction Solid Waste Policies and Regulations. Construction of the Proposed Modifications would potentially conflict with State and local statutes, policies and regulations related to solid waste.</p> | LSM | LSM | LSM | LSM | LSM | LSM | PS-3: Construction Waste Reduction and Recycling Plan. (Applies to all Proposed Modifications). | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure PS-3 would continue to apply to the Injection Well Facilities with the proposed Deep Injection Well #6 Changes. These impact conclusions and associated mitigation measure(s) remain the same as in the 2021 Certified SEIR.</p> |
| <p>PS-4: Public Services Demand During Operation. Operation of the Proposed Modifications would not result in increased</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|--|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| <p>demands for fire and police protection services, schools, or parks that would result in the need for new or physically altered facilities to maintain service capacity or performance objectives.</p> | | | | | | | | <p>of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>PS-5: Landfill Capacity for Operations. Operation of the Proposed Modifications would not result in adverse effects on landfill capacity or be out of compliance with Federal, State, and local statutes and regulations related to solid waste.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>TR-1: Construction Traffic. Construction of the Proposed Modifications would result in a temporary increase in traffic volumes on regional and local roadways due to construction-related vehicle trips, which would not result in conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.</p> | LS | LS | LS | LS | LS | LS | None required. | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>TR-2: Construction-Related Traffic Increases, Safety and Access Limitations. Construction activities could result in temporary traffic increases, safety hazards, and/or disruption of access.</p> | LS | LS | LS | LS | LSM | LSM | TR-2: Traffic Control and Safety Assurance Plan. (Applies to CalAm Conveyance Pipeline). | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>TR-3: Construction-Related Roadway Deterioration. Construction truck trips could result in increased wear-and-tear on the designated haul routes, which could result in temporary impacts to performance of the regional circulation system.</p> | LSM | LSM | LSM | LSM | LSM | LSM | TR-3: Roadway Rehabilitation Program (Applies to All Proposed Modifications). | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. Mitigation Measure TR-3 would continue to apply to the Injection Well Facilities with the proposed Deep</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|--|--|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| | | | | | | | | <p>Injection Well #6 Changes. These impact conclusions and associated mitigation measure(s) remain the same as in the 2021 Certified SEIR.</p> |
| <p>TR-4: Construction Parking Interference. Construction activities may temporarily affect parking availability.</p> | LS | LS | LS | LS | LSM | LSM | <p>TR-4: Construction Parking Requirement (CalAm Conveyance Pipeline).</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>TR-5: Operational Traffic. Operation and maintenance of the Proposed Modifications would result in small traffic increases on regional and local roadways, but would not substantially affect the performance of the regional circulation system or result in a significant increase in VMT.</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>WW-1: Construction-Related Water Demand. The Proposed Modifications would result in a temporary increase in water use due to construction-related demand. Existing water supplies would be sufficient to serve this construction-related demand. No new or expanded water supply sources are warranted.</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR.</p> |
| <p>WW-2: Construction-Related Wastewater Generation. The Proposed Modifications would result in a temporary increase in wastewater generation due to demand from construction workers, but existing</p> | LS | LS | LS | LS | LS | LS | <p>None required.</p> | <p>The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions</p> |

Table 1. Summary of Impacts and Mitigation Measures

| Impact Statement | Advanced Water Purification Facility (no changes) | Product Water Conveyance Pipeline (no changes) | Injection Well Facilities with proposed Deep Injection Well #6 Changes | CalAm Distribution System Extraction Wells (no changes) | CalAm Distribution System Conveyance Pipelines (no changes) | Proposed Modifications Overall (no changes) | Mitigation Measure Number, Name, and Applicability | Notes about proposed Deep Injection Well #6 Changes to the Injection Well Facilities |
|---|---|--|--|---|---|---|--|---|
| <p><i>KEY TO ACRONYMS: NI – No Impact; LS – Less than Significant; LSM – Less than Significant with Mitigation; SU – Significant and Unavoidable; BI- Beneficial Impact</i></p> | | | | | | | | |
| wastewater treatment facilities have sufficient capacity to serve construction-related demands. | | | | | | | | remain the same as in the 2021 Certified SEIR. |
| <p>WW-3: Operational Water Supply. Sufficient water supplies are available for operation of the Proposed Modifications.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>WW-4: Operational Wastewater Treatment Capacity. Operation of the Proposed Modifications would not result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the Proposed Modifications' projected demand in addition to M1W's existing commitments.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |
| <p>WW-5: Operational Need for New Water or Wastewater Treatment Facilities or Expansion. Operation of the Proposed Modifications would not result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities beyond those evaluated in this Supplemental Draft EIR.</p> | LS | LS | LS | LS | LS | LS | None required. | The proposed Deep Injection Well #6 Changes would not worsen the severity of this impact. These impact conclusions remain the same as in the 2021 Certified SEIR. |

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

| # | Topical Section/ Cumulative Impact Issue | Determination of Significance and Discussion of Contribution of the Proposed Modifications to Cumulative Impacts (if applicable) | |
|------|--|---|--|
| 4.2 | Aesthetics | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to significant cumulative construction or operational aesthetic impacts. | |
| 4.3 | Air Quality and Greenhouse Gas | LSM: The proposed Deep Injection Well #6 Changes would potentially make a considerable contribution to significant cumulative regional emissions of PM ₁₀ ; however, with implementation of Mitigation Measure AQ-1, the impact would be reduced to less than significant. | |
| 4.4 | Biological Resources: Fisheries | NI: The proposed Deep Injection Well #6 Changes would make no contribution to a cumulative impact on fishery biological resources. | |
| 4.5 | Biological Resources: Terrestrial | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a considerable contribution to significant cumulative impacts to terrestrial biological resources. | |
| 4.6 | Cultural and Paleontological Resources | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to significant cumulative construction or operational cultural resources impacts. | |
| 4.7 | Energy | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to significant cumulative energy resource impacts. | |
| 4.8 | Geology, Soils, and Seismicity | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative geology, seismicity or soils impacts. | |
| 4.9 | Hazards and Hazardous Materials | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative impacts related to hazards or hazardous materials. | |
| 4.10 | Hydrology/Water Quality: Groundwater | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to cumulative impacts to hydrology and water quality of groundwater resources. | |
| 4.11 | Hydrology/Water Quality: Surface Water | Inland Surface Waters | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to cumulative construction or operational impacts to hydrology or water quality of inland surface waters. |
| | | Marine Surface Waters | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to cumulative construction or operational impacts to hydrology or water quality of marine waters. |
| 4.12 | Land Use | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to a cumulative land use impact. | |
| 4.13 | Marine Biological Resources | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to cumulative impacts to marine biological resources. | |
| 4.14 | Noise and Vibration | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to construction or operational cumulative noise and vibration impacts. | |
| 4.15 | Population and Housing | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a considerable contribution to significant cumulative impacts related to population and housing | |

³ No changes to the conclusions of the cumulative impact analysis would occur due to the proposed Deep Injection Well #6 Changes. Because the proposed Deep Injection Well #6 Changes do not increase the extent or intensity of any construction or operational activities, there would be no increase to the severity of any cumulative impacts, nor would there be any new cumulative impacts. The proposed Deep Injection Well #6 Changes would not result in any new significant cumulative impacts or worsen the severity of any significant cumulative impacts previously identified in the 2021 Certified SEIR. These impact conclusions and mitigation measures remain the same as in the 2021 Certified SEIR.

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

| # | Topical Section/ Cumulative Impact Issue | Determination of Significance and Discussion of Contribution of the Proposed Modifications to Cumulative Impacts (if applicable) |
|------|--|--|
| 4.16 | Public Services, Recreation, and Utilities | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to cumulative impacts related to schools, parks, recreational facilities or other public services and utilities (fire and police protection, solid waste). |
| 4.17 | Traffic and Transportation | LS: The proposed Deep Injection Well #6 Changes would not cause the Project to make a cumulatively considerable contribution to significant cumulative traffic and transportation impact. |
| 4.18 | Water Supply and Wastewater Systems | LS: The proposed Deep Injection Well #6 Changes would not cause the project as a whole to contribute to a new significant cumulative impact or substantially increase the severity of the project's contribution to a significant cumulative impact on water supply or wastewater system |

This page is intentionally blank.

APPENDIX C

Mitigation Monitoring and Reporting Program

This page is intentionally blank.

MITIGATION MONITORING AND REPORTING PROGRAM
for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project:
(April 12, 2021)

INTRODUCTION

Section 21081.6 of the California Public Resources Code and Section 15091(d) and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines require public agencies “to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.” This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project (Proposed Modifications). This MMRP is based on the mitigation measures included in the Final Supplemental Environmental Impact Report for the Proposed Modifications (Final SEIR).

This MMRP includes only the mitigation measures, monitoring and reporting requirements identified in the Final SEIR for the Proposed Modifications, and it does not include mitigation measures identified for the original Pure Water Monterey Groundwater Replenishment Project (PWM/GWR Project), which was approved on October 8, 2015 and analyzed in the PWM/GWR Project EIR.

For a complete list of acronyms used in this document, please refer to the acronym list in the Draft SEIR on pages x through xi.

This page intentionally left blank.

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|--|--|--|---|--|-----------------------------|--|
| Impact AE-2: Construction Impacts due to Temporary Light and Glare | Mitigation Measure AE-2: Minimize Construction Nighttime Lighting. As part of its contract specifications, CalAm and M1W shall require its construction contractors to implement site-specific nighttime construction lighting measures for nighttime construction at the Injection Well Facilities, Extraction Wells, and Conveyance Pipelines. The measures shall, at a minimum, require that lighting be shielded, directed downward onto work areas to minimize light spillover, and specify that construction lighting use the minimum wattage necessary to provide safety at the construction sites. M1W shall ensure these measures are implemented at all times during nighttime construction. | CalAm Extraction Wells and Conveyance Pipelines | In contract specifications and during project construction | M1W, CalAm, construction contractors | During project construction | M1W and CalAm |
| Impact AE-3: Degradation of Visual Quality of Sites and Surrounding Areas | Mitigation Measure AE-3: Provide Aesthetic Screening for New Above-Ground Structures. The aboveground features at the proposed CalAm Extraction Wells, shall be designed to minimize visual impacts by incorporating screening with vegetation, or other aesthetic design treatments, subject to review and approval of the City of Seaside, which has also requested that the buildings be designed with Monterey/Mission style architecture to match the design of the structures that have been built on the Santa Margarita ASR site and the Seaside Middle School ASR Site. All pipelines placed within the City of Seaside on General Jim Moore Boulevard shall be placed underground. CalAm shall coordinate with the City of Seaside on the location of Extraction Wells. Use of standard, commercial-grade, chain link fencing and barbed wire should be discouraged. | CalAm Extraction Wells | Prior to City of Seaside and City of Marina issuance of grading, easements/ ROW permits | M1W project engineers and contractors | During project construction | M1W; Cities of Seaside and Marina (public works directors) |
| Impact AE-4: Impacts due to Permanent Light and Glare during Operations | Mitigation Measure AE-4: Exterior Lighting Minimization. To prevent exterior lighting from affecting nighttime views, the design and operation of lighting at the Injection Well Facilities and CalAm Extraction Wells, shall adhere to the following requirements: <ul style="list-style-type: none"> • Use of low-intensity street lighting and low-intensity exterior lighting shall be required. • Lighting fixtures shall be cast downward and shielded to prevent light from spilling onto adjacent offsite uses. • Lighting fixtures shall be designed and placed to minimize glare that could affect users of adjacent properties, buildings, and roadways. • Fixtures and standards shall conform to state and local safety and illumination requirements. | Injection Well Facilities and CalAm Extraction Wells | Prior to City of Seaside and Marina issuance of grading and easements/ ROW permits | M1W project engineers and contractors | During project operation | M1W; Cities of Seaside and Marina (public works directors) |
| Impact AQ-1: Construction Criteria Pollutant Emissions | Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan. The following standard Dust Control Measures shall be implemented during construction to help prevent potential nuisances to nearby receptors due to fugitive dust and to reduce contributions to exceedances of the state ambient air quality standards for PM ₁₀ , in accordance with MBARD's CEQA Guidelines. <ol style="list-style-type: none"> a. Water all active construction areas as required with non-potable sources to the extent feasible; frequency should be based on the type of operation, soil, and wind exposure and minimized to prevent wasteful use of water. b. Prohibit grading activities during periods of high wind (over 15 mph). c. Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard. d. Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites. e. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. f. Enclose, cover, or water daily exposed stockpiles (dirt, sand, etc.). g. Replant vegetation in disturbed areas as quickly as possible. h. Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the Advanced Water Purification Facility site, and the Injection Well Facilities. i. Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall also be visible to ensure compliance with MBARD rules. j. Per Monterey Bay Air Resources District recommendations, when feasible, the project shall use construction and tree remover equipment that conforms to ARB's Tier 3 or Tier 4 emission standards or construction equipment that uses alternative fuels such as | All Proposed Modifications | During project construction | M1W, CalAm project engineers and contractors | During project construction | M1W, CalAm, and MBARD |

¹ CalAm Extraction Wells and Conveyance Pipelines and the associated mitigation measures would be the responsibility of CalAm to implement and the local jurisdictions and/or the California Public Utilities Commission to monitor.

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|--|--|---|---|--|--|--|
| | compressed natural gas (CNG), propane, electricity or biodiesel to reduce diesel exhaust emissions. | | | | | |
| Impact BT-1: Construction Impacts to Special-Status Species and Habitat | <p>Mitigation Measure BT-1a: Implement Construction Best Management Practices. The following best management practices shall be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:</p> <ol style="list-style-type: none"> 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 special-status 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 USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the site. 2. Trees and vegetation not planned for removal or trimming shall be protected prior to and during construction to the maximum extent possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw shall be used, to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact. 3. Protective fencing shall be placed prior to and during construction to keep construction equipment and personnel from impacting vegetation outside of work limits. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact. 4. Following construction, disturbed areas shall be restored to pre-construction contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist. 5. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction). 6. No firearms shall be allowed on the construction sites at any time. 7. All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area. 8. To protect against spills and fluids leaking from equipment, the project proponent shall require that the construction contractor maintains an on-site spill plan and on-site spill containment measures that can be easily accessed. 9. Refueling or maintaining vehicles and equipment should only occur within a specified staging area that is at least 100 feet from a waterbody (including riparian and wetland habitat) and that has sufficient management measures that will prevent fluids or other construction materials including water from being transported into waters of the state. Measures shall include confined concrete washout areas, straw wattles placed around stockpiled materials and plastic sheets to cover materials from becoming airborne or otherwise transported due to wind or rain into surface waters. 10. The project proponent and/or its contractors shall coordinate with the City of Seaside on the location the Expanded Injection Well Area and the removal of sensitive biotic material. | All Proposed Modifications, except the Advanced Water Purification Facility | Prior to, during and after project construction | M1W, CalAm, construction contractors and qualified biologist | Prior to and during project construction | M1W, CalAm, qualified biologist and construction biological monitor; City of Seaside for Injection Well Facilities |
| Impact BT-1: Construction Impacts to Special-Status | <p>Mitigation Measure BT-1b: Implement Construction-Phase Monitoring. The project proponents shall retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species shall be determined in coordination with CDFW prior to any ground disturbing activities and conducted by a qualified biologist with appropriate scientific collection permit. After</p> | All Proposed Modifications, except the Advanced Water Purification Facility | Prior to and during project construction | M1W, qualified biologists | Prior to and during project construction | M1W qualified biologist and construction biological |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---------------------------------|---|---|-----------------------------|--|-----------------------------|---|
| Species and Habitat (continued) | <p>ground disturbing project activities are complete, the qualified biologist shall train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor shall be the contact for any specialstatus wildlife species encounters, shall conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and shall ensure that all installed fencing stays in place throughout the construction period. The qualified biologist shall then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor shall have the authority to stop and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log shall also include any special-status wildlife species observed and relocated.</p> | | | | | monitor; CDFW |
| | <p>Mitigation Measure BT-1c: Implement Non-Native, Invasive Species Controls. The following measures shall be implemented to reduce the introduction and spread of non-native, invasive species:</p> <ol style="list-style-type: none"> 1. Any landscaping or replanting required for the project shall not use species listed as noxious by the California Department of Food and Agriculture (CDFA). 2. 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 Biological Study Area. 3. 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. 4. All non-native, invasive plant species shall be removed from disturbed areas prior to replanting. | All Proposed Modifications, except the Advanced Water Purification Facility | During project construction | Construction contactors | During project construction | M1W qualified biologist and construction biological monitor |

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|--|--|---|--|---|---|
| <p>Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)</p> | <p>Mitigation Measure BT-1d: Conduct Pre-Construction Surveys for California Legless Lizard. The project proponents shall retain a qualified biologist to prepare and implement a legless lizard management plan in coordination with CDFW, which shall include, but is not limited to, the protocols for pre-construction surveys, construction monitoring, and salvage and relocation. The management plan shall include, but is not limited to, the following:</p> <ul style="list-style-type: none"> • Pre-Construction Surveys. Pre-construction surveys for legless lizards shall be conducted in all suitable habitat proposed for construction, ground disturbance, or staging. The qualified biologist shall hold or obtain a CDFW scientific collection permit for this species. The pre-construction surveys shall use a method called “high-grading.” The high grading method shall include surveying the habitat where legless lizards are most likely to be found, and the survey must occur under the conditions when legless lizards are most likely to be seen and captured (early morning, high soil moisture, overcast, etc.). The intensity of a continued search may then be adjusted, based on the results of the first survey in the best habitat. • A “three pass method” shall be used to locate and remove as many legless lizards as possible. A first pass shall locate as many legless lizards as possible, a second pass should locate fewer lizards than the first pass, and a third pass should locate fewer lizards than the second pass. All search passes shall be conducted in the early morning when legless lizards are easiest to capture. Vegetation may be removed by hand to facilitate hand raking and search efforts for legless lizards in the soil under brush. If lizards are found during the first pass, an overnight period of no soil disturbance must occur before the second pass, and the same requirement shall be implemented after the second pass. If no lizards are found during the second pass, a third pass is not required. Installation of a barrier, in accordance with the three-pass method, shall be required if legless lizards are found at the limits of construction (project boundaries) and sufficient soft sand and vegetative cover are present to suspect additional lizards are in the immediate vicinity on the adjacent property. A barrier shall prevent movement of legless lizards into the property. All lizards discovered shall be handled according to the salvage procedures outlined below. • Construction Monitoring. Monitoring by a qualified biologist shall be ongoing during construction. The onsite monitor shall be present during all ground-disturbing construction activities. To facilitate the careful search for lizards during construction, vegetation may need to be removed. If removal by hand is impractical, equipment such as a chainsaw, string trimmer, or skid-steer may be used, if a monitor and crew are present. The task of the vegetation removal is to remove plants under the direction of the monitor, allowing the monitor to watch for legless lizards. After plants are removed, the monitor and crew shall search the exposed area for legless lizards. If legless lizards are found during pre-construction surveys or construction monitoring, the protocols for salvage and relocation identified below shall be followed. Upon completion of pre-construction surveys, construction monitoring, and any resulting salvage and relocation actions, a report shall be submitted to the CDFW. The CDFW must be notified at least 48 hours before any field activity begins. • Salvage and Relocation. Only experienced persons may capture or handle legless lizards. The monitor must demonstrate a basic understanding, knowledge, skill, and experience with this species and its habitat. Once captured, a lizard shall be placed in a lidded, vented box containing clean sand. Areas of moist and dry sand need to be present in the box. The boxes must be kept out of direct sunlight and protected from temperatures over 72°F. The sand must be kept at temperatures under 66°F. Ideal temperatures are closer to 60°F. On the same day as capture, the lizards shall be examined for injury and data recorded on location where found as well as length, color, age, and tail condition. Once data is recorded, lizards shall be relocated to appropriate habitat, as determined through coordination with the CDFW, qualified biologist, and potential landowners. • Suitability of habitat for lizard release must be evaluated and presented in a management plan. The habitat must contain habitat factors most important to the health and survival of the species such as appropriate habitat based on soils, vegetated cover, native plant species providing cover, plant litter layer and depth, soil and ambient temperature, quality and composition of invertebrate population and prey availability. Potential relocation sites that contain the necessary conditions may exist within the habitat reserves on the former Fort Ord, including the Fort Ord National Monument. Lizards shall be marked with a unique tag (pit or tattoo) prior to release. Release for every lizard shall be recorded with GPS. GPS locations shall be submitted as part of the survey result report to document the number and locations of lizards relocated. | <p>Product Water Conveyance Pipelines, Injection Well Facilities, and Extraction Wells</p> | <p>Prior to and during project construction</p> | <p>M1W, qualified biologist</p> | <p>Prior to and during project construction</p> | <p>M1W, qualified biologist</p> |

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|--|--|--------------------------------------|--|---|---|
| | <p>Mitigation Measure BT-1e: Prepare and Implement Rare Plant Restoration Plan to Mitigate Impacts to Kellogg’s Horkelia. Impacts to rare plant species individuals shall be avoided through project design and modification, to the extent feasible while taking into consideration other site and engineering constraints. If avoidance is not possible, the species shall be replaced at a 1:1 ratio for area of impact through preservation, restoration, or combination of both. A Rare Plant Restoration Plan, approved by the Lead Agency 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:</p> <ol style="list-style-type: none"> 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. Specifically, seed shall be collected from the on-site individuals that would be impacted and grown in a local greenhouse, and then transplanted within the mitigation area. Plants shall be transplanted while they are young seedlings in order to develop a good root system. Alternatively, the mitigation area may be broadcast seeded in fall; however, if this method is used, some seed shall be retained in the event that the seeding fails to produce viable plants and contingency measures need to be employed. 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. <p>The mitigation area shall be preserved in perpetuity through a conservation easement or other legally enforceable land preservation agreement. Exclusionary fencing shall be installed around the mitigation area to prevent disturbance until success criteria have been met.</p> | <p>Product Water Conveyance Pipeline and Injection Well Facilities</p> | <p>Prior to project construction</p> | <p>Project engineers, project biologist, M1W</p> | <p>For 3 years upon completion of construction</p> | <p>M1W qualified biologist</p> |
| <p>Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)</p> | <p>Mitigation Measure BT-1f: Conduct Pre-Construction Protocol-Level Botanical Surveys within the remaining portion of the Biological Study Area. The project proponents shall retain a qualified biologist to conduct protocol-level surveys for special-status plant species within the Biological Study Area not yet surveyed. 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 1) a description of the species observed, if any; 2) map of the location, if observed; and 3) recommended avoidance and minimization measures, if applicable. The avoidance and minimization measures shall include, but are not limited to, the following:</p> <ul style="list-style-type: none"> Impacts to species individuals shall be avoided through project design and modification, to the extent feasible while taking into consideration other site and engineering constraints. If impacts to State listed plant species cannot be avoided, the project proponents shall comply with the CESA and consult with the CDFW to determine whether authorization for the incidental take of the species is required prior to commencing construction. If it is determined that authorization for incidental take is required from the CDFW, the project proponents shall comply with the CESA to obtain an incidental take permit prior to commencing construction on the site upon which State listed plant species could be taken. Permit requirements typically involve preparation and implementation of a mitigation plan and mitigating impacted habitat at a 3:1 ratio through preservation and/or restoration. At a minimum, the impacted plant species shall be replaced at a 1:1 ratio through preservation and/or restoration, as described below. The project proponents shall retain a qualified biologist to prepare a mitigation plan, which shall include, but is not limited to identifying; avoidance and minimization measures; mitigation strategy, including a take assessment, avoidance and minimization measures, compensatory mitigation lands, and success criteria; and funding assurances. The project proponents shall be required to implement the approved plan and any additional permit requirements. If impacts to non-State listed, special-status plant species cannot be avoided, the species shall be replaced at a 1:1 ratio for acreage and/or individuals impacted through preservation, restoration, or combination of both. A Rare Plant Restoration Plan, approved by the project proponents prior to commencing of construction on the site upon which the rare plant would be impacted, shall be prepared and implemented by a qualified biologist. The plan shall include, but is not limited to, the following: 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. Specifically, seed shall be collected from the on-site individuals that will be impacted and grown in a local greenhouse, and then transplanted within the mitigation | <p>All Proposed Modifications, except the Advanced Water Purification Facility</p> | <p>Prior to project construction</p> | <p>M1W, qualified biologist</p> | <p>During construction and 3 years following completion of construction</p> | <p>M1W qualified biologist</p> |

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|--|---|---|---|---|---|
| | <p>area. Plants shall be transplanted while they are young seedlings in order to develop a good root system. Alternatively, the mitigation area may be broadcast seeded in fall; however, if this method is used, some seed shall be retained in the event that the seeding fails to produce viable plants and contingency measures need to be employed.</p> <ul style="list-style-type: none"> A description of a three-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. The mitigation area shall be preserved in perpetuity through a conservation easement or other legally enforceable land preservation agreement. Exclusionary fencing shall be installed around the mitigation area to prevent disturbance until success criteria have been met. | | | | | |
| <p>Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)</p> | <p>Mitigation Measure BT-1h: Implementation of Mitigation Measures BT-1a and BT-1b to Mitigate Impacts to the Monterey Orate Shrew, Coast Horned Lizard, Coast Range Newt, Two-Striped Garter Snake, and Salinas Harvest Mouse. If these species are encountered, implementation of Mitigation Measures BT-1a and BT-1b, which avoid and minimize impacts through implementing construction best management practices and monitoring, would reduce potential impacts to these species to a less-than-significant level.</p> | <p>Injection Well Facilities and Extraction Wells</p> | <p>Prior to and during project construction</p> | <p>M1W contractors and qualified biologists</p> | <p>Prior to and during project construction</p> | <p>M1W qualified biologist</p> |
| | <p>Mitigation Measure BT-1i: Conduct Pre-Construction Surveys for Monterey Dusky-Footed Woodrat. To avoid and reduce impacts to the Monterey dusky-footed woodrat, the project proponents shall retain a qualified biologist to conduct pre-construction surveys in suitable habitat proposed for construction, ground disturbance, or staging within three days prior to construction for woodrat nests within the project area and in a buffer zone 100 feet out from the limit of disturbance. All woodrat nests shall be flagged for avoidance of direct construction impacts and protection during construction, where feasible. Nests that cannot be avoided shall be manually deconstructed prior to land clearing activities to allow animals to escape harm. If a litter of young is found or suspected, nest material shall be replaced, and the nest left alone for two to three weeks before a re-check to verify that young are capable of independent survival before proceeding with nest dismantling.</p> <p>The following specific requirements of MPWSP Final EIR/EIS (MMs 4.6-1k) shall also be required.</p> <p>If woodrat nests are found during the preconstruction surveys, the wildlife biologist shall conduct additional surveys throughout the duration of construction activities at the potentially affected facility site to identify any newly constructed woodrat nests.</p> <p>If nests are observed outside of the construction area, the qualified biologist shall demarcate a minimum 50-foot buffer area with orange construction fencing and require that all construction activities and disturbance remain outside of the fencing.</p> <p>Active woodrat nests located within the anticipated construction disturbance areas shall be relocated. Nests shall be relocated outside of the peak breeding season, (peak breeding season is typically February through November) to minimize disturbance to young woodrats.</p> <p>Protocol for relocation of woodrats and/or their nests by qualified biologists shall be followed, as described below:</p> <ol style="list-style-type: none"> Clear understory vegetation from around the nest using hand tools. After all vegetative cover has been cleared around the nest, the biologist shall gently disturb the nest to encourage the woodrat(s) to abandon the nest and seek cover in adjacent habitat. Once the woodrats have left the nest, the biologist shall carefully relocate the nest sticks to suitable habitat outside of the construction disturbance area, piling the sticks at the base of trees or large shrubs if available. If multiple nests are relocated, the stick piles shall be placed at least 25 feet from one another. The qualified biologist shall ensure potential health hazards to the biologists moving nests are addressed to minimize the risk of contracting diseases associated with woodrats and woodrat nests. If young are encountered during dismantling of the nest, nest material shall be replaced and a 50-foot no-disturbance buffer shall be established around the active nest. The buffer shall remain in place until young have matured enough to disperse on their own accord and the nest is no longer active. Nesting substrate shall then be collected and relocated to suitable oak woodland habitat outside of the project area. | <p>Injection Well Facilities and Extraction Wells</p> | <p>Prior to project construction</p> | <p>M1W contractors and qualified biologists</p> | <p>Prior to project construction</p> | <p>M1W qualified biologist</p> |

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|---|--|---|---|--------------------------------------|---|
| <p>Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)</p> | <p>Mitigation Measure BT-1j: Conduct Pre-Construction Surveys for American Badger. To avoid and reduce impacts to the American badger, the project proponents shall retain a qualified biologist to conduct focused pre-construction surveys for badger dens in all suitable habitat proposed for construction, ground disturbance, or staging no more than two weeks prior to construction. Surveys shall be conducted wherever suitable habitat exist within 100 feet of the project area boundary. Vegetation communities in the project area include non-native grasslands. Along pipeline alignments, surveys shall be phased to occur within 14 days prior to disturbance along that portion of the alignment. Game cameras shall be used to record any movements at potentially active dens for no less than three (3) nights. If no potential badger dens are present, no further mitigation is required. If potential dens are observed, the following measures are required to avoid potential significant impacts to the American badger:</p> <ol style="list-style-type: none"> 1. If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent badgers from re-using them during construction. 2. If the qualified biologist determines that potential dens may be active, the den shall be monitored for a period sufficient (as determined by a qualified biologist) to determine if the den is a maternity den occupied by a female and her young, or if the den is occupied by a solitary badger. 3. Maternity dens occupied by a female and her young shall be avoided during construction and a minimum buffer of 200 feet in which no construction activities shall occur shall be maintained around the den. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. 4. Solitary male or female badgers shall be passively relocated by blocking the entrances of the dens with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project construction disturbance. The den entrances shall be blocked to an incrementally greater degree over the three to five-day period. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. <p>The following applicable requirements of MPWSP Final EIR/EIS (MM 4.6-1j), Item 6, shall also be required.</p> <p>If active badger dens are found during the course of preconstruction surveys, the following measures shall be taken to avoid and minimize adverse effects on American badger:</p> <ol style="list-style-type: none"> a. Relocation shall be prohibited during the badger pupping season (typically February 15 to June 1). b. Construction activities shall not occur within 50 feet of active badger dens observed outside of the project area. c. The qualified biologist shall contact CDFW immediately if natal badger dens are detected. The 200-foot buffer area identified in 3) above, may be reduced, if approved by CDFW, and if construction would not alter the behavior of the adult or young in a way that would cause injury or death to those individuals. d. If the biologist determines that potential dens within the project area, and outside the breeding season, may be active, the biologist shall notify the CDFW. | <p>Injection Well Facilities and Extraction Wells</p> | <p>Prior to project construction</p> | <p>M1W construction contractors and qualified biologists</p> | <p>Prior to project construction</p> | <p>M1W qualified biologist</p> |
| | <p>Mitigation Measure BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark. Prior to the start of construction activities at each project component site, a qualified biologist shall conduct pre-construction surveys for active nests. Pre-construction surveys shall be conducted no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted are detected. Surveys shall cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected (including direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment) by the project.</p> <ol style="list-style-type: none"> 1. No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 16 to January 31). 2. For all construction activities scheduled to occur during the nesting season (February 1 to September 15), the qualified biologist shall conduct a preconstruction avian nesting survey no more than 10 days prior to the start of staging, site clearing, and/or ground disturbance. 3. Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue | <p>All Proposed Modifications, except the Advanced Water Purification Facility</p> | <p>Prior to project construction and if found establish and comply with no-disturbance buffer</p> | <p>M1W, CalAm, construction contractors, and qualified biologists</p> | <p>Prior to project construction</p> | <p>M1W, CalAm, qualified biologist(s), USFWS</p> |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|--|--|---|---|---------------------------------------|---|
| | <p>during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys shall be determined by the qualified biologist based on review of the final construction plans.</p> <p>4. If there is a break of 10 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction.</p> <p>5. The qualified biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds.</p> <p>6. If active nests are found in the project area or vicinity (500 feet for raptors and 300 feet for other birds), the nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, . avoidance and minimization measures shall be applied to ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult’s behavior so it could not care for an active nest or young.</p> <p>If continuous monitoring is not feasible, a no-disturbance buffer (at least 500 feet for raptors and 250 feet for other birds [or as otherwise determined in consultation with CDFW] shall be created around the active nests). These buffers will remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. If the nest(s) are found in an area where ground disturbance is scheduled to occur, the project operator shall require that ground disturbance be delayed until after the birds have fledged. The buffer distance can be reduced with authorization from CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult’s behavior so it could not care for an active nest or young.</p> | | | | | |
| <p>Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)</p> | <p>Mitigation Measure BT-1m: Minimize Effects of Nighttime Construction Lighting. Nighttime construction lighting shall be focused and downward directed to preclude night illumination of the adjacent open space area.</p> | <p>Injection Well Facilities and Extraction Wells</p> | <p>During project construction</p> | <p>M1W and CalAm construction contractors</p> | <p>During project construction</p> | <p>M1W, CalAm, City of Seaside, City of Monterey</p> |
| <p>Impact BT-3: Construction Conflicts with Local Policies, Ordinances, or Approved Habitat Conservation Plan.</p> | <p>Mitigation Measure BT-4. Fort Ord HMP Plant Species Salvage. For impacts to the Fort Ord HMP plant species within the Biological Study Area that do not require take authorization from USFWS or CDFW, salvage efforts for these species shall be evaluated by a qualified biologist per the requirements of the Fort Ord HMP and Biological Opinion. A salvage plan shall be prepared and implemented by a qualified biologist, which shall include, but is not limited to: a description and evaluation of salvage opportunities and constraints; a description of the appropriate methods and protocols of salvage and relocation efforts; identification of relocation and restoration areas; and identification of qualified biologists approved to perform the salvage efforts, including the identification of any required collection permits from USFWS and/or CDFW. Where proposed, seed collection shall occur from plants within the Biological Study Area and topsoil shall be salvaged within occupied areas to be disturbed. Seeds shall be collected during the appropriate time of year for each species by qualified biologists. At the time of seed collection, a map shall also be prepared that identifies the specific locations of the plants for any future topsoil preservation efforts. The collected seeds shall be used to revegetate temporarily disturbed construction areas and reseeded and restoration efforts on- or off-site, as determined appropriate in the salvage plan.</p> | <p>Product Water Conveyance Pipeline, Expanded Injection Well Facilities, Extraction Wells, and CalAm Conveyance Pipelines</p> | <p>Prior to, during, and after construction</p> | <p>M1W Biologist</p> | <p>During, and after construction</p> | <p>M1W qualified biologist</p> |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|---|---------------------------------------|---|--|--|---|
| Impact CR-1: Construction Impacts on Archaeological Resources or Human Remains | <p>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, an archaeologist shall inspect the find within 24 hours of discovery. The archaeologist, in consultation with the project proponent and the appropriate Native American Representative, determine whether preservation in place is feasible. Consistent with CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is determined to be infeasible, a qualified archaeologist, in consultation with M1W and the appropriate Native American Representative, shall prepare and implement an Archaeological Research Design and Treatment Plan (ARDTP). Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code Section 21083.2 and be implemented with the oversight and concurrence of the Lead Agency.</p> <p>Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The ARDTP shall include provisions for analysis of data in a regional context, reporting of results within a timely manner and subject to review and comments by the appropriate Native American representative before being finalized, curation of artifacts and data at a local facility acceptable to the appropriate Native American representative, and dissemination of final confidential reports to the appropriate Native American representative, the Northwest Information Center of the California Historical Resources Information System, the Lead Agency and interested professionals.</p> <p>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 Sec. 5097 if the remains are determined to be of Native American origin.</p> | All Proposed Modifications components | During project construction | M1W, CalAm, and qualified archaeologists | During project construction | M1W, CalAm, and qualified archaeologist |
| | <p>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.</p> | All Proposed Modifications | During project construction | M1W, CalAm and qualified archaeologist | During project construction | M1W, CalAm and qualified archaeologist |
| Impact EN-1: Construction Impacts due to Temporary Energy Use | <p>Mitigation Measure EN-1: Construction Equipment Efficiency Plan. M1W (for all components) or CalAm (for the CalAm Extraction Facilities and Distribution System) shall contract with a qualified professional (i.e., construction manager, planner or energy efficiency consultant) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures that M1W or CalAm (and its construction contractors) will implement as part of project construction to increase the efficient use of construction equipment. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; consistent compliance with idling restrictions of the State; and identification of procedures (including the use of routing plans for haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. Compliance with reduction of heavy equipment idling onsite to a maximum of 5 minutes per the California Air Resources Board requirement on Heavy Duty Diesel Vehicles shall be enforced by on-site construction monitors. More specifically, the plan will conform to Per California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, which limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Grading plans shall reference this requirement and a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling. The plan (including the use of routing plans for haul trips) shall be submitted to the permitting agency and/or lead agency (M1W or local jurisdictions responsible for individual permits) at least 20 days prior to the beginning of construction activities.</p> | All Proposed Modification components | Prior to project construction | M1W, CalAm. energy efficiency expert, construction contractors | During project construction | M1W and CalAm |
| Impact LU-1: Operational Consistency with Plans, Policies, and | <p>All other mitigation measures (see Table 4.12-4 in Section 4.12, Land Use, Agriculture, and Forest Resources).</p> | All Proposed Modifications components | See other rows for specific timing of each mitigation measure | See other lines for responsibilities for each mitigation | See other rows for specific timing of each | See other rows for responsibilities for each mitigation measure |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---------------------------------|--|--|--|--|-------------------------------|--|
| Regulations | | | | measure | mitigation measure | |
| Impact NV-1: Construction Noise | <p>Mitigation Measure NV-1a: Drilling Contractor Noise Measures. Contractor specifications shall include a requirement that drill rigs located within 700 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings or other noise reducing technology and the line of sight between the drill rig and nearby sensitive receptors shall be blocked by portable acoustic barriers and/or shields to reduce noise levels such that drill rig noise levels are no more 75 dBA at 50 feet. This would reduce the nighttime noise level to less than 60 dBA Leq at the nearest residence.</p> <p>The contractor shall submit to the M1W and the Seaside Building Official, a “Well Construction Noise Control Plan” for review and approval. The plan shall identify all feasible noise control procedures that would be implemented during night-time construction activities. At a minimum, the plan shall specify the noise control treatments to achieve the specified above noise performance standard.</p> | Expanded Injection Well Facilities, CalAm Extraction Wells | Prior to and during project construction | Construction contractors | During project construction | M1W, Seaside building official |
| | <p>Mitigation Measure NV-1c: Neighborhood Notice. Residences and other sensitive receptors within 900 feet of a nighttime construction area shall be notified of the construction location and schedule in writing, at least two weeks prior to the commencement of construction activities. The notice shall also be posted along the proposed pipeline alignments, near the proposed facility sites, and at nearby recreational facilities. The contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and included in the construction schedule notification sent to nearby residences.</p> | Expanded Injection Well Facilities, CalAm Extraction Wells | Prior to project construction | M1W, CalAm, construction contractor, noise disturbance coordinator | Prior to project construction | M1W and CalAm |
| | <p>Mitigation Measure NV-1e: Additional Noise Controls for Nighttime Construction of Wells. The construction contractor(s) shall identify feasible noise controls for implementation during well drilling development activities within 500 feet of the Fitch Park military housing community. The construction contractor(s) shall locate all stationary noise-generating equipment as far as possible from nearby noise-sensitive receptors. Drill rigs within 500 feet of noise-sensitive receptors shall be equipped with noise-reducing engine housings or other noise-reducing technology. Additionally, acoustic barriers and/or enclosures shall be used with a goal of reducing noise from well drilling activities to 60 dBA Leq or less at residences. There are a number of options available to achieve this performance standard. Barrier blankets are available with a sound transmission class rating of 32, which can provide 16 to 40 dBA of sound transmission loss, depending on the frequency of the noise source (ENC, 2014). The realized sound transmission reduction of barrier blankets needs to be sufficient to achieve the performance standard of 60 dBA Leq or less at residences.</p> | CalAm Extraction Wells | Prior to and during construction | CalAm, construction contractor, noise disturbance coordinator | During project construction | CalAm, MPWMD, and Seaside Building official working with the U.S. Army and Monterey Peninsula Unified School District |
| | <p>Mitigation Measure NV-1f: Offsite Accommodations for Substantially Affected Nighttime Receptors near Wells. CalAm shall provide temporary hotel accommodations for all residences and any other nighttime sensitive receptors:</p> <ol style="list-style-type: none"> That would be exposed to 24-hour project construction activities and Where nighttime construction noise would exceed 60 dBA with windows closed or 35 dBA with windows open, even with implementation of acoustic barriers and/or shielding measures. <p>The accommodations shall be provided for the duration of 24-hour construction activities. CalAm shall provide accommodations reasonably similar to those of the impacted residents in terms of number of beds and amenities. If identified accommodations do not include typical residential kitchen facilities (e.g., cooktop, oven, full size refrigerator), then CalAm shall provide displaced individuals with a per diem allowance to offset costs of meals for the period of relocation.</p> | CalAm Extraction Wells | During construction | CalAm, construction contractor, noise disturbance coordinator | Prior to project construction | CalAm, MPWMD, and/or Seaside Building official working with the U.S. Army and Monterey Peninsula Unified School District |
| Impact NV-2: Operational Noise | <p>Mitigation Measure NV-2: Stationary-Source Noise Controls. CalAm shall retain an acoustical engineer to design stationary-source noise controls and ensure the applicable noise standards are met. At a minimum, all stationary noise sources at EW-3 and EW-4 shall be located within enclosed structures and with adequate noise control to maintain noise levels to no greater than 55 CNEL (or 48 dBA Leq assuming 24-hour per day operation), at the property lines of nearby residences. Once the stationary noise sources have been installed, the contractor(s) shall conduct a single long-term (24-hour) monitoring of noise levels to ensure that noise levels resulting from the operation of the well comply recommended noise limits.</p> | EW-3 and EW-4 | During project construction | M1W construction contractor | During project construction | CalAm and Seaside building officials (working with U.S. Army) |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|--|-----------------------------------|---|---|------------------------------------|---|
| <p>Impact PS-3: Construction Solid Waste Policies and Regulations</p> | <p>Mitigation Measure PS-3: Construction Waste Reduction and Recycling Plan. The construction contractor(s) shall prepare and implement a construction waste reduction and recycling plan identifying the types of construction debris generated and the manner in which those waste streams will be handled. In accordance with the California Integrated Waste Management Act of 1989, the plan shall emphasize source reduction measures, followed by recycling and composting methods, to ensure that construction and demolition waste generated is managed consistent with applicable statutes and regulations. In accordance with the California Green Building Standards Code and local regulations, the plan shall specify that all trees, stumps, rocks, and associated vegetation and soils, and 50% of all other nonhazardous construction and demolition waste, be diverted from landfill disposal. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with Monterey County’s Integrated Waste Management Plan. Upon project completion, M1W and CalAm shall collect the receipts from the contractor(s) to document that the waste reduction, recycling, and diversion goals have been met.</p> | <p>All Proposed Modifications</p> | <p>Prior to, during, and after project construction</p> | <p>M1W and CalAm construction contractors</p> | <p>Upon project completion</p> | <p>M1W and CalAm</p> |
| <p>Impact TR-2: Construction-Related Traffic Delays, Safety and Access Limitations</p> | <p>Mitigation Measure TR-2: Traffic Control and Safety Assurance Plan. Prior to construction, MW1 and CalAm shall prepare and implement a traffic control plan for the roadways and intersections affected by the Product Water Conveyance Pipeline, Injection Well Facilities, and CalAm Conveyance Pipeline. The traffic control plan(s) shall comply with the affected jurisdiction’s encroachment permit requirements and shall be based on detailed design plans. The plan shall include measures that would provide for continuity of vehicular, pedestrian, and bicyclist access; reduce the potential for traffic accidents; and ensure worker safety in construction zones. Where project construction activities could disrupt mobility and access for bicyclists and pedestrians, the plan shall include measures to ensure safe and convenient access would be maintained. The traffic control and safety assurance plan shall be developed on the basis of detailed design plans for the approved project. The plan shall include, but not necessarily be limited to, the elements listed below:</p> <p><i>General</i></p> <p>a. Develop circulation and detour plans to minimize impacts on local streets. As necessary, signage and/or flaggers shall be used to guide vehicles to detour routes and/or through the construction work areas.</p> <p>b. Implement a public information program to notify motorists, bicyclists, nearby residents, and adjacent businesses of the impending construction activities (e.g., media coverage, email notices, websites, etc.). Notices of the location(s) and timing of lane closures shall be published in local newspapers and on available websites to allow motorists to select alternative routes.</p> <p><i>Roadways</i></p> <p>c. Haul routes that minimize truck traffic on local roadways and residential streets shall be used to the extent feasible.</p> <p>d. Schedule truck trips outside of peak morning and evening commute hours to minimize adverse impacts on traffic flow.</p> <p>e. Limit lane closures during peak hours. Travel lane closures, when necessary, shall be managed such that one travel lane is kept open at all times to allow alternating traffic flow in both directions along affected two-lane roadways. In the City of Marina, one-way traffic shall be limited to a maximum of 5 minutes of traffic delay.</p> <p>f. Restore roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress.</p> <p>g. Comply with roadside safety protocols to reduce the risk of accidents. Provide “Road Work Ahead” warning signs and speed control (including signs informing drivers of state legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. Train construction personnel to apply appropriate safety measures as described in the plan.</p> <p>h. Provide flaggers in school areas at street crossings to manage traffic flow and maintain traffic safety during the school drop-off and pickup hours on days when pipeline installation would occur in designated school zones.</p> <p>i. Maintain access to private driveways.</p> <p>j. Coordinate with MST so the transit provider can temporarily relocate bus routes or bus stops in work zones as deemed necessary.</p> <p><i>Pedestrian and Bicyclists</i></p> <p>k. Perform construction that crosses on street and off street bikeways, sidewalks, and other walkways in a manner that allows for safe access for bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.</p> <p><i>Recreational Trails</i></p> <p>l. At least two weeks prior to construction, post signage along all potentially affected recreational trails; Class I, II, and II bicycle routes; and</p> | <p>CalAm Conveyance Pipeline</p> | <p>Prior to project construction</p> | <p>M1W and CalAm construction contractor</p> | <p>During project construction</p> | <p>M1W, CalAm, and City of Seaside</p> |

Mitigation Monitoring and Reporting Program – Proposed Modifications to the PWM/GWR Project

| Impacts | Mitigation Measures | Applicable Components | Timing of Implementation | Implementation Responsibility ¹ | Timing of Monitoring | Responsibility for Compliance Monitoring ¹ |
|---|---|-----------------------------------|--|---|------------------------------------|---|
| | <p>pedestrian pathways, to warn bicyclists and pedestrians of construction activities. The signs shall include information regarding the nature of construction activities, duration, and detour routes. Signage shall be composed of or encased in weatherproof material and posted in conspicuous locations, including on park message boards, and existing wayfinding signage and kiosks, for the duration of the closure period. At the end of the closure period, CalAm, M1W or either of its contractors shall retrieve all notice materials.</p> <p>Emergency Access</p> <p>m. Maintain access for emergency vehicles at all times. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools.</p> <p>n. Provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways.</p> <p>o. Avoid truck trips through designated school zones during the school drop-off and pickup hours.</p> | | | | | |
| <p>Impact TR-3: Construction-Related Roadway Deterioration</p> | <p>Mitigation Measure TR-3: Roadway Rehabilitation Program. Prior to commencing project construction, M1W and CalAm shall detail the preconstruction condition of all local construction access and haul routes proposed for substantial use by project-related construction vehicles. The construction routes surveyed must be consistent with those identified in the construction traffic control and safety assurance plan developed under Mitigation Measure TR-2. After construction is completed, the same roads shall be surveyed again to determine whether excessive wear and tear or construction damage has occurred. Roads damaged by project-related construction vehicles shall be repaired to a structural condition equal to, or greater than, that which existed prior to construction activities.</p> | <p>All Proposed Modifications</p> | <p>Prior to project construction, after project construction</p> | <p>M1W and CalAm construction contractors</p> | <p>After project construction</p> | <p>M1W, CalAm, and City of Seaside</p> |
| <p>Impact TR-4: Construction Parking Interference</p> | <p>Mitigation Measure TR-4: Construction Parking Requirement. Prior to commencing project construction, the construction contractor(s) shall coordinate with the City of Seaside to identify designated worker parking areas that would avoid or minimize parking displacement in congested areas of Seaside. The contractors shall provide transport between the designated parking location and the construction work areas. The construction contractor(s) shall also provide incentives for workers that carpool or take public transportation to the construction work areas. The engineering and construction design plans shall specify that contractors limit time of construction within travel lanes and public parking spaces and provide information to the public about locations of alternative spaces to reduce parking disruptions.</p> | <p>CalAm Conveyance Pipeline</p> | <p>Prior to project construction</p> | <p>M1W and CalAm construction contractor</p> | <p>During project construction</p> | <p>M1W, City of Seaside</p> |