

ADDENDUM No. 6

TO THE

AQUIFER STORAGE AND RECOVERY PROJECT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

FOR THE

BYPASS PIPELINE & DE-CHLORINATION FACILITY MODIFICATION

July 2020

Prepared for
Monterey Peninsula Water Management District

Prepared by
Denise Duffy and Associates, Inc.



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LIST OF ATTACHMENTS

1. Initial Study Checklist for the Proposed Modification to Support Addendum No. 6 to the ASR EIR/EA
2. Air Quality and GHG Calculations Spreadsheets dated June 19, 2020
3. ASR Bypass Pipeline & De-Chlorination Facility Modification – Botanical Survey Results (June 24, 2020)
4. Approved MMRP for the Aquifer Storage and Recovery Project

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I. INTRODUCTION

Pursuant to the California Environmental Quality Act, California Public Resources Code Sections 21000 et seq. (CEQA) and the California Environmental Quality Act Guidelines, Title 14, Chapter 3 of the California Code of Regulations (CEQA Guidelines), and in cooperation with other affected agencies and entities, the Monterey Peninsula Water Management District (MPWMD) has prepared this Addendum to the Final Environmental Impact Report/Environmental Assessment for the Monterey Peninsula Water Management District Phase 1 Aquifer Storage and Recovery (ASR) Project (EIR/EA), certified by MPWMD's Board of Directors on August 21, 2006, as modified by:

- Addendum No. 1 to the ASR EIR/EA, which addressed full implementation of ASR Phase 2 and was adopted by MPWMD's Board of Directors on April 16, 2012;
- Addendum No. 2 to the ASR EIR/EA, which addressed the addition of the Hilby Pump Station and was adopted by MPWMD's Board of Directors on June 20, 2016;
- Addendum No. 3 to the ASR EIR/EA, which addressed the Monterey Pipeline and was adopted by MPWMD's Board of Directors on February 22, 2017;
- Addendum No. 4 to the ASR EIR/EA, which addressed the Backflush Basin Expansion and was adopted by MPWMD's Board of Directors on July 16, 2018; and,
- Addendum No. 5 to the ASR EIR/EA, which addressed the Water Treatment Facility Modification and was adopted by MPWMD's Board of Directors on July 15, 2019.

MPWMD prepared this Addendum to the ASR EIR/EA to address the effects of constructing and operating the proposed Bypass Pipeline and De-Chlorination Facility Modification (Proposed Modification), which would constitute a minor modification to the ASR Project. This Addendum evaluates the potential environmental effects associated with the Proposed Modification, which consists of a 36-inch potable water transmission pipeline, located in General Jim Moore Boulevard between Hilby Avenue and Coe Avenue, and a proposed de-chlorination facility to serve the ASR project.

The ASR Project entails diversion of "excess" Carmel River winter flows, as allowed under water rights permits issued by the State Water Resources Control Board, which is then treated and transmitted via the California American Water (CalAm) distribution system to specially-constructed injection/recovery wells, known as ASR wells, in the Seaside Groundwater Basin and injected under an authorization from the Environmental Protection Agency (EPA). The excess water is diverted by CalAm wells only during periods when flows in the Carmel River exceed fisheries bypass flow requirements. After treatment to potable drinking water standards, water is then conveyed through CalAm's distribution system to ASR facilities (injection wells) to recharge the over-pumped Seaside Groundwater Basin. Available storage capacity in the Seaside Groundwater Basin serves as an underground reservoir for the diverted water. Water is then pumped back out from the Seaside Groundwater Basin in dry periods to help reduce pumping-related impacts on the Carmel River. This "conjunctive use" more efficiently utilizes local water resources to improve the reliability of the community's water supply while reducing the environmental impacts to the Carmel River and Seaside Groundwater Basins.

This Addendum evaluates whether construction and operation of the proposed Bypass Pipeline and De-Chlorination Facility would result in a new significant impact, or an impact that is substantially more severe than the impacts disclosed in the ASR EIR/EA as amended. This Addendum is supported by **Attachment 1, Initial Study Checklist for the Bypass Pipeline Modification**, which conclusively determines the following in accordance with CEQA Guidelines Section 15464:

- No new or previously unidentified adverse significant impacts would result from the construction and operation of the Proposed Modification.
- The Proposed Modification would not result in a substantial increase in the severity of the impacts identified in the ASR EIR/EA and Addenda.

MPWMD's Board of Directors will consider this Addendum, along with the certified ASR EIR/EA and its Addenda, prior to making a decision on any approvals pertaining to the Proposed Modification.

II. PROJECT LOCATION

The Proposed Modification is located in the City of Seaside. More specifically, the Proposed Modification includes the construction of the Bypass Pipeline, which is located within the existing paved area of the General Jim Moore Boulevard roadway between Hilby Avenue and approximately 750 feet south of Coe Avenue and the Paralta well site (see **Figure 1. Regional Map**). The Bypass Pipeline is primarily located in the northbound lane of General Jim Moore Boulevard and will tie into an existing pipeline at the intersection of Hilby Avenue and General Jim Moore Boulevard

The Proposed Modification also includes the construction and operation of a de-chlorination facility located within the Paralta well site, which is a previously developed site that includes existing water distribution system infrastructure. The existing water distribution system improvements includes a well and associated infrastructure (see **Figure 2. Site Photos**). The de-chlorination facility would tie into an existing ASR pipeline along the southbound lane of General Jim Moore Boulevard. This existing pipeline would transfer de-chlorinated water to ASR Wells 3 and 4 to be injected into the Seaside Groundwater Basin. The de-chlorination facility would also connect to an existing water transfer pipeline, which would transfer water supplies from the proposed Bypass Pipeline to the de-chlorination facility, as more thoroughly described below. The Proposed Modification also includes the construction and operation of a de-chlorination facility at the existing Santa Margarita Treatment facility, located at 1910 General Jim Moore Boulevard. The de-chlorination facility at the Santa Margarita site would occur entirely within the existing footprint of the treatment facility.

The Proposed Modification also includes the use of an existing soil deposition site along the west side of General Jim Moore Boulevard. More specifically, the soil deposition site is along Mescal Street between Plumas Avenue and Kimball Avenue and has been used historically for soil deposition purposes (see **Figure 2. Site Photos**).

As previously mentioned, the Proposed Modification is located in the City of Seaside. Per the Seaside General Plan, the modification site is designated as Low-Density Single Family Residential. The surrounding land uses include existing residential uses to the north, habitat management and low-density single family residential to the south and east, and existing residential uses to the west (see **Figure 3. Surrounding Land Use**).

III. PROJECT DESCRIPTION

The Proposed Modification would improve the existing ASR system and allow CalAm to perform simultaneous ASR injection and extraction operations to meet customer demand as a result of reduced Carmel River diversions, as well as ensure the simultaneous recovery of Pure Water Monterey water and the injection of Carmel River water as part of the ASR program. The Proposed Modification would be used

to convey water from the existing Crest Water Tank to ASR Wells 3 and 4 for injection. Extraction operations would be performed at ASR Wells 1 and 2 and would be conveyed through existing infrastructure to Forest Lake Reservoir in Pacific Grove. Under current CalAm permit requirements, a 30-day retention period is required between ASR injection and extraction operations. Due to reduced Carmel River diversions, CalAm would not be able to meet customer demand during the 30-day retention period when extraction operations are not allowed.

The Proposed Modification consists of several distinct sub-components, including the construction and operation of the proposed Bypass Pipeline, de-chlorination facility, and the use of an existing soil deposition site. These components are collectively referred to as the “Proposed Modification” in this Addendum. The following includes a description of each of the separate sub-components of the Proposed Modification.

BYPASS PIPELINE MODIFICATION

The proposed Bypass Pipeline Modification is necessary to allow the simultaneous recovery of Pure Water Monterey water and the operation of the existing ASR system. Under existing operations, the simultaneous recovery of Pure Water Monterey water and the operation of the existing ASR system is not possible due to existing system limitations. As a result, an additional pipeline (i.e., the proposed Bypass Pipeline) is necessary to allow recovery of Pure Water Monterey water and injection of Carmel River water at the same time. If the proposed Bypass Pipeline Modification is not constructed, even if flows in the Carmel River are above permit conditions allowing injection, ASR injection would need to be stopped to recover all Pure Water Monterey water via the existing transfer pipeline. The proposed Bypass Pipeline Modification would allow both Pure Water Monterey and ASR water resources projects to function simultaneously.

In the absence of the proposed Bypass Pipeline Modification, ASR injection would be limited to certain months. This would substantially reduce the injection capacity of the ASR system. And it would further reduce the amount of available “ASR bank.” Without the Bypass Pipeline Modification, Seaside Basin and Carmel River source water may have a 200 acre-feet (AF) buffer or less. Whereas with the proposed Bypass Pipeline Modification, would increase the “ASR bank” and would result in an approximately 1,000 AF buffer. As a result, the proposed Bypass Pipeline Modification would improve existing system operation, provide additional system redundancy, and ensure the simultaneous operation of both the Pure Water Monterey and ASR projects.

The Bypass Pipeline consists of the construction and operation of a new 36-inch-diameter, 7,000 linear foot (LF), potable water transmission pipeline located in General Jim Moore Boulevard between Hilby Avenue and approximately 750 feet south of Coe Avenue in Seaside, CA (see **Figure 2. Site Photos**). The Bypass Pipeline would connect to an existing 36-inch pipeline at each end. The Bypass Pipeline would be constructed using open trench technology within the paved roadway of the northbound lanes of General Jim Moore Boulevard (see **Figures 4a. and 4b. Site Plan**). The typical trench width would be approximately 6-feet wide and 6.5-feet deep. Excess soil would be handled and disposed of per requirements of the Fort Ord Reuse Authority (FORA) and City of Seaside Programmatic On-Call Construction Support Plan – Roadways and Utilities – Seaside Munitions Response Area. Pavement and striping would be restored per City of Seaside requirements. Traffic control plans would be developed and submitted to the City of Seaside for review and approval. The pipeline would include blow off and air vent appurtenances installed in either the sidewalk or median of General Jim Moore Boulevard. Blow offs would be pump out style, located within utility boxes that are flush with the surrounding ground. Air vents would be installed above grade in locked cages. The locations of the appurtenances would be per approval of the City of Seaside.

DE-CHLORINATION FACILITY MODIFICATION

The Proposed Modification would include the construction and operation of the de-chlorination facility, which would be located at the Paralta well site on southwest corner of General Jim Moore Boulevard and Coe Avenue (see **Figure 4a. Site Plan**). The proposed de-chlorination facility modification would dechlorinate water prior to injection into ASR Wells 3 and 4 which would remove the 30-day retention period requirement discussed above thereby allowing CalAm to meet customer demand. The de-chlorination facility would include two connections at General Jim Moore Boulevard and Coe Avenue. One connection would be to an existing transfer pipeline that would bring water supplies in through the proposed Bypass Pipeline and the other connection would be to an existing ASR pipeline in order to inject the de-chlorinated water into ASR Wells 3 and 4 .

The de-chlorination facility would be housed in an approximately 268 square foot building and would include a skid pump, chemical tank, and associated piping. The energy use associated with the electrical components of de-chlorination facility include the building and the interior lighting, sodium bisulfite metering pumps, exhaust fan, sodium bisulfite analyzer system and chlorine residual analyzer systems, and instrumentation. These electrical components would require an additional load of approximately 20 Amps. The de-chlorination facility would connect to a new 16-inch diameter connection to existing ASR Wells 3 and 4 located at the Seaside Middle School.

The Proposed Modification would include the construction and operation of the de-chlorination facility at the existing Santa Margarita Treatment Facility, located at 1910 General Jim Moore Boulevard. This modification would occur entirely within the existing treatment facility footprint. The proposed de-chlorination facility modification would dechlorinate water prior to injection into ASR Wells 1 and 2 which would remove the 30-day retention period requirement discussed above thereby allowing CalAm to meet customer demand.

SOIL DEPOSITION MODIFICATION

The Proposed Modification also includes the use of a soil deposition site along the west side of General Jim Moore Boulevard, known as the Mescal site. More specifically, the soil deposition site is along Mescal Street between Plumas Avenue and Kimball Avenue and has been used for soil deposition associated with ASR construction activities in the past (see **Figure 4b. Site Plan**). Excess soil would be disposed of at this existing soil deposition site consistent with the requirements of FORA. Additionally, fencing and/or flagging will be installed at the soil deposition site under the direction of a qualified biologist to ensure that all documented special-status species are located outside of the soil deposition area.

CONSTRUCTION AND OPERATION

Construction is anticipated to begin in January of 2021 and will last approximately eight (8) months. Construction activities will include site grading and trenching. The total amount of earthwork for the Proposed Modification is 7,800 Cubic Yards (CY) of cut and 5,270 CY of fill, with a net cut and fill of approximately 2,530 CY. It is anticipated that a majority of native soils can be used as backfill. Construction is planned to occur Monday through Friday from 7am to 7pm. It is estimated that an average of eight (8) construction workers will be required onsite during construction with a peak on-site presence of approximately eight (8) to ten (10) personnel at the peak of construction. Materials and equipment will also be delivered to the site; it is anticipated that approximately 100 deliveries would occur during construction, which would include piping, fill material, the chemical building, chemical tank, pump skid, and concrete. This would mean that material delivery would occur approximately two (2) to three (3)

times per week throughout the duration of construction activities. Construction workers will access the site from General Jim Moore Boulevard and will park at or near the site. Traffic control will be required during construction. Traffic controls will include, at a minimum, measures to ensure safety of pedestrians and bicyclists on General Jim Moore Boulevard.

Additionally, operational workers will access the modification site (specifically the de-chlorination facility) in order to provide routine maintenance and material delivery. Furthermore, maintenance will take place once a month for the air valves on the pipeline alignment. Operational workers may visit the de-chlorination facility twice a week when the de-chlorination system is operated and ASR water is being injected to ASR Wells 3 and 4, which would probably be combined with maintaining the existing Paralta well site. Lastly, the chemical tank in the de-chlorination facility was sized for at least 14-days of storage so operational workers may deliver up to two (2) trucks of chemicals each month.

IV. COMPARISON TO THE CONDITIONS LISTED IN CEQA GUIDELINES SECTION 15162

MPWMD prepared this Addendum 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 Section 15162 calling for preparation of a subsequent EIR have occurred." CEQA Guidelines Section 15162 establishes the following criteria for the preparation of a Supplemental EIR.

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration 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 negative declaration 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 negative declaration was adopted, shows any of the following:
 - a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - 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.

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 Modification and why an addendum is appropriate.

V. CHANGES TO THE PROJECT

1. Project Background

The ASR EIR/EA and its Addenda did not contemplate the Proposed Modification. The draft ASR EIR/EA can be accessed on the MPWMD website at the following address: <http://www.mpwmd.net/wp-content/uploads/2015/08/MPWMD-Draft-EIR-EA-3-06.pdf>; the final ASR EIR/EA can be accessed at the following address: https://www.mpwmd.net/wp-content/uploads/2015/08/FEIR_8-21-06.pdf. Addendum No. 1 to that document can be found online at the following address: http://www.mpwmd.net/asd/board/boardpacket/2012/20120416/16/item16_exh16b.pdf, Addendum No. 2 can be found here: <http://www.mpwmd.net/asd/board/boardpacket/2016/20160620/16/Item-16-Exh-A.pdf>, and Addendum No. 3 can be found here: <https://www.mpwmd.net/asd/board/boardpacket/2017/20170222/02/Item-2-Exh-A.pdf>. Addendum No. 4 can be found here: <https://www.mpwmd.net/asd/board/boardpacket/2018/20180716/16/Item-16-Exh-A.pdf>. Addendum No. 5 to that document can be found online at the following address: <https://www.mpwmd.net/asd/board/boardpacket/2019/20190715/18/Item-18-Exh-A.pdf>

2. Environmental Effects

As detailed in **Attachment 1, Initial Study Checklist for the Proposed Modification**, the Proposed Modification would not result in any new significant environmental effects that cannot be mitigated with existing, previously identified mitigation measures in the ASR EIR/EA and its Addenda. In addition, the Proposed Modification would not substantially increase the severity of environmental effects identified in the ASR EIR/EA and its Addenda.

3. New Information

No new information of substantial importance has been identified or presented to MPWMD such that the ASR Project would result in: 1) significant environmental effects not identified in the ASR EIR/EA and its Addenda, or 2) more severe environmental effects than described in the ASR EIR/EA and its Addenda, or 3) require mitigation measures which were previously determined not to be feasible, or mitigation measures that are considerably different from those recommended in the ASR EIR/EA and its Addenda.

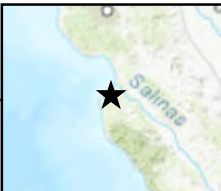
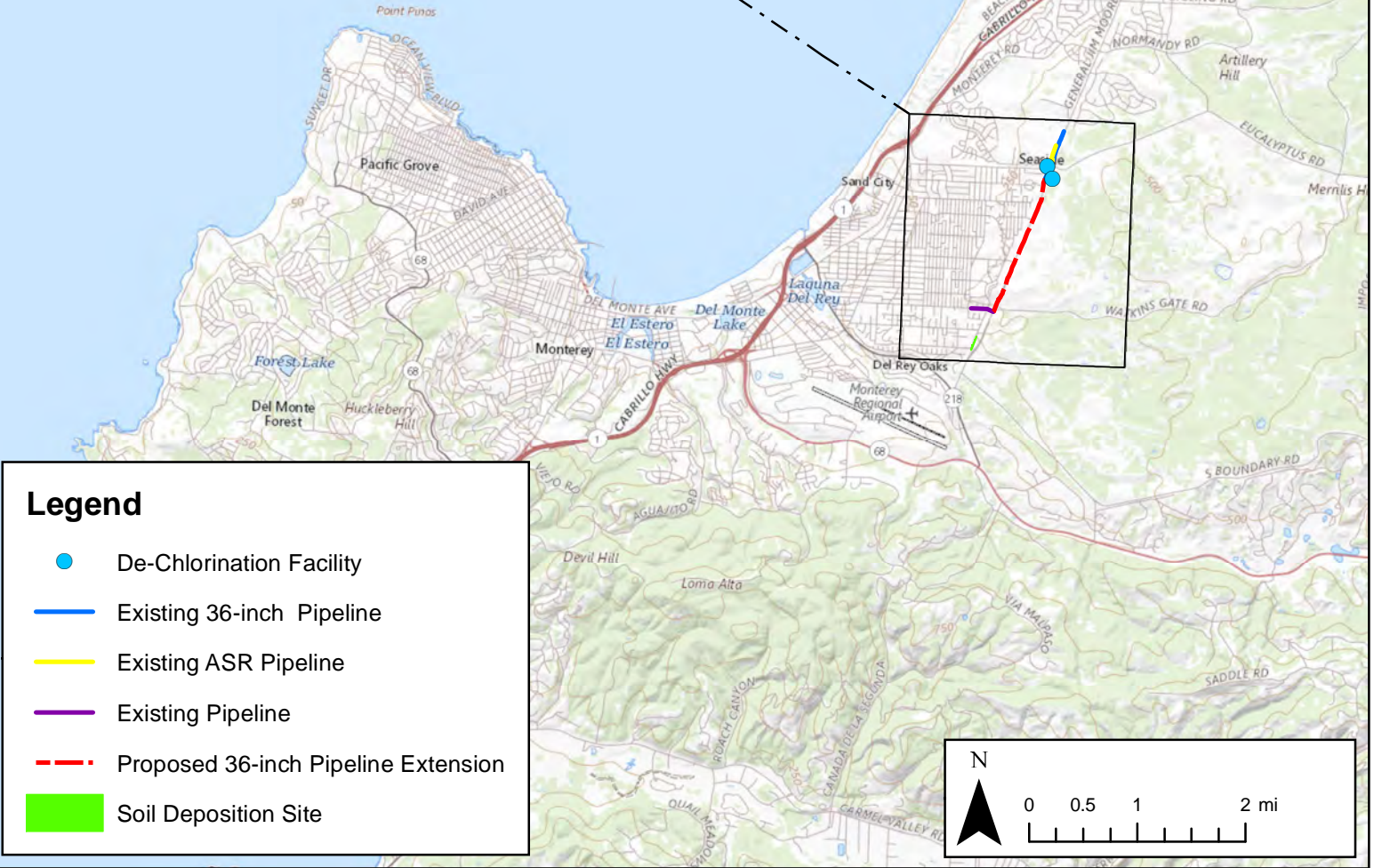
4. Conclusion

Section 15164 of the CEQA Guidelines states that 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 Section 15162 calling for preparation of a subsequent EIR have occurred. Based on the information in this Addendum, MPWMD 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 the construction and operation of the Proposed Modification;
- No substantial changes have occurred or would occur with respect to the circumstances under which the ASR Project was originally undertaken, which would require major revisions to the previously certified ASR EIR/EA due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

Addendum No.6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

- 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 previous ASR EIR/EA and its Addenda were certified as complete.



Title: **Regional Map**

Date: 6/30/2020
 Scale: 1 inch = 1.6 miles
 Project: 2011-26

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Figure
1



Photo 1. Proposed de-chlorination facility facing south/southwest.



Photo 2. Proposed de-chlorination facility facing west.



Photo 3. Proposed soil deposition site facing east.



Photo 4. Proposed pipeline alignment within the right of way of General Jim Moore Blvd facing north.

Title:
Site Photos




Date: 6/24/2020
Scale: --
Project: 2020-15














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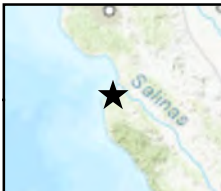
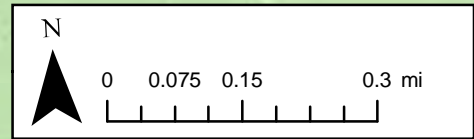
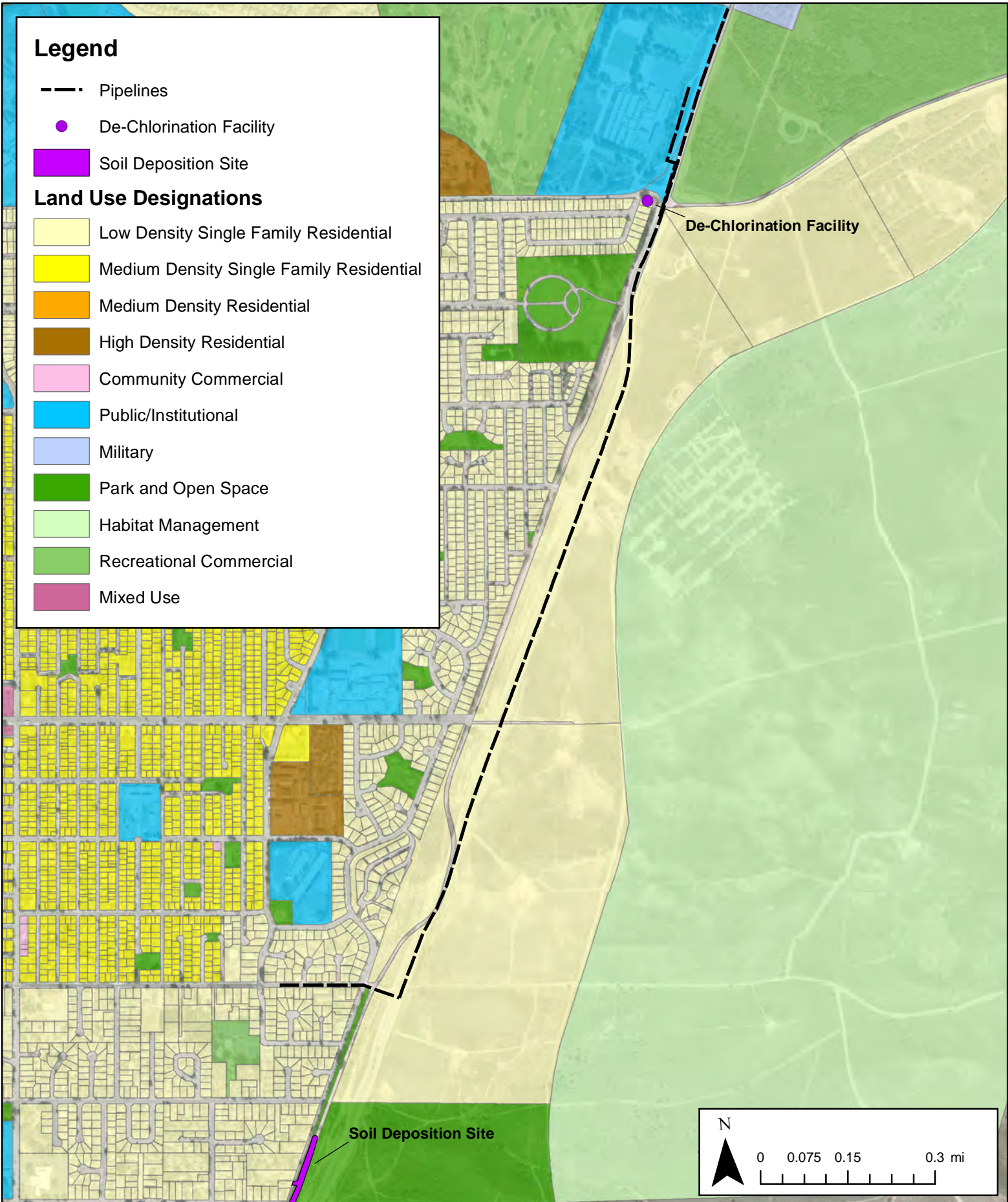
Figure
2

Legend

-  Pipelines
-  De-Chlorination Facility
-  Soil Deposition Site

Land Use Designations

-  Low Density Single Family Residential
-  Medium Density Single Family Residential
-  Medium Density Residential
-  High Density Residential
-  Community Commercial
-  Public/Institutional
-  Military
-  Park and Open Space
-  Habitat Management
-  Recreational Commercial
-  Mixed Use



Title:
Surrounding Land Use

Date: 6/24/2020
 Scale: 1 inch = 0.21 miles
 Project: 2020-15



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Figure
3



Title:
Site Plan

Date: 6/24/2020
Scale: --
Project: 2020-15

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Figure
4a



Title:
Site Plan

Date: 6/24/2020

Scale: --

Project: 2020-15



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Figure
4b

ATTACHMENT 1

*INITIAL STUDY CHECKLIST FOR THE BYPASS PIPELINE AND DE-CHLORINATION
FACILITY MODIFICATION TO SUPPORT ADDENDUM NO. 6 TO THE ASR EIR/EA*

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I. PROJECT DATA

Project Title: Bypass Pipeline and De-Chlorination Facility Modification

Lead Agency Name and Address: Monterey Peninsula Water Management District, 5 Harris Court, Building G, Monterey, CA 93940, Mailing Address is: PO Box 85, Monterey, CA 93942-0085

Contact Person and Phone Number: Jonathan Lear, PG, CHg, Water Resources Manager, (831) 227-6001

Project Proponents: Monterey Peninsula Water Management District (MPWMD)

Project Location: The Proposed Modification is located in the City of Seaside. More specifically, the Proposed Modification includes the construction of the Bypass Pipeline Modification, which is located within the existing paved area of the General Jim Moore Boulevard roadway between Hilby Avenue and approximately 750 feet south of Coe Avenue and the Paralta well site. The Bypass Pipeline is primarily located in the northbound lane of General Jim Moore Boulevard and would tie into an existing pipeline at the intersection of Hilby Avenue and General Jim Moore Boulevard.

The Proposed Modification also includes the construction and operation of a de-chlorination facility located within the Paralta well site, which is a previously developed site that includes existing water distribution system infrastructure. The water supply infrastructure improvements at the existing Paralta well site includes a well and associated infrastructure to extract water supplies from the Seaside Groundwater Basin. The proposed de-chlorination facility modification would dechlorinate water prior to injection into ASR Wells 3 and 4 which would remove the 30-day retention period requirement allowing CalAm to meet customer demand. The de-chlorination facility would include two connections at General Jim Moore Boulevard and Coe Avenue. One connection would be to an existing transfer pipeline that would bring water supplies in through the proposed Bypass Pipeline and the other connection would be to an existing ASR pipeline in order to inject the de-chlorinated water into ASR Wells 3 and 4 .

Lastly, the Proposed Modification also includes the use of a soil deposition site along the west side of General Jim Moore Boulevard. More specifically, the soil deposition site is along Mescal Street between Plumas Avenue and Kimball Avenue and has been used for soil deposition associated with ASR construction activities in the past.

City of Seaside General Plan Designation: Low Density Single Family Residential

Zoning: Single Family Residential (RS-8)

Project Description: The Proposed Modification consists of several distinct sub-components, including the construction and operation of the proposed Bypass Pipeline, de-chlorination facility, and the Soil Deposition site, which are collectively referred to as the “Proposed Modification” in this Addendum. The Bypass Pipeline is a 7,000 LF potable water transmission pipeline located in General Jim Moore Boulevard. The de-chlorination facility would transfer de-chlorinated water to ASR Wells 3 and 4 to be injected into the Seaside Groundwater Basin and would be located at the Paralta well site on southwest corner of General Jim Moore Boulevard and Coe Avenue. In addition, the de-chlorination modification also entails the construction and operation of a de-chlorination facility within the existing footprint of the treatment facility at the Santa Margarita site. Lastly, the Proposed Modification also entails the use of an existing soil deposition site along Mescal Street between Plumas Avenue and Kimball Avenue. This site would be used for any excess soil. This site has been used for soil deposition in the past.

Surrounding Land Uses:

- North: Existing residential uses
- South: Habitat management and low-density single family residential
- East: Habitat management and low-density single family residential
- West: Existing residential uses

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

All of the following environmental factors identified below are discussed within **Section III. Evaluation of Environmental Impacts**. Those that are checked were found to be areas that the full implementation of the Proposed Modification may significantly impact without mitigation. Sources used for analysis of environmental effects are listed in **Section IV. References**.

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

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III. EVALUATION OF ENVIRONMENTAL IMPACTS

1. Aesthetics

EXISTING SETTING

The existing site is in a disturbed area, within the roadway of General Jim Moore Boulevard in the City of Seaside. In addition, a portion of the modification is also located on an existing site that is developed with existing water supply infrastructure (i.e., Paralta and Santa Margarita sites). The Proposed Modification is not visible from Highway 1 or located near a designated scenic vista. The modification is located adjacent to the Former Fort Ord. The site consists of the existing roadway right-of-way and a portion of the site is improved with existing water infrastructure. The surrounding area is primarily habitat management to the east and low density single family residential to the west. The visual quality of the site is considered medium, as it is surrounded primarily by open space which is characteristic of the region’s natural visual environment. The overall visual sensitivity of the site is considered low, as the site is improved with existing infrastructure (i.e., roads and water supply infrastructure).

CHECKLIST

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified less than significant impacts related to scenic views, degradation of visual character, creation of light and glare during construction activities, and alteration of existing visual character. The ASR EIR/EA identified a significant impact resulting from creation of new light and glare associated with well operation that would be reduced to less than significant with implementation of *Mitigation Measure VIS-1: Incorporate Light-Reduction Measures into the Plan and Design of Exterior Lighting at Well Site*.
- Addendum No. 1 to the ASR EIR/EA also identified a potentially significant impact would result from implementation of ASR Phase 2 related to the creation of new light and glare at the well site, however, this impact would be reduced to less than significant with the implementation of *Mitigation Measure VIS-1: Incorporate Light-Reduction Measures into the Plan and Design of Exterior Lighting at Well Site*.

- Addendum No. 2 to the ASR EIR/EA did not identify any potentially significant aesthetic impacts related to the construction and operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any additional potentially significant aesthetic impacts related to the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any additional potentially significant aesthetic impacts related to the Backflush Basin Expansion project.
- Addendum No. 5 to the ASR EIR/EA did not identify any additional potentially significant aesthetic impact related to the Water Treatment Facility Modification.

DISCUSSION

a, b) Less Than Significant Impact. The Proposed Modification is not located within a scenic highway corridor or in an area that is considered to be a scenic vista. The Proposed Modification site is improved with existing infrastructure (i.e., roadways and water supply infrastructure). As a result, the construction of the Proposed Modification would not have a substantial adverse effect on a scenic vista or substantially damage scenic resources within a state scenic highway. Therefore, the introduction of new water supply infrastructure associated with the Proposed Modification would have a less than significant impact to scenic vista and scenic resources.

c) Less than Significant Impact. The Proposed Modification would result in minimal changes to the existing visual character of the area, as the existing site is currently disturbed and contains water infrastructure facilities and existing paved areas (i.e., General Jim Moore Boulevard). The Proposed Modification would result in the construction of a new water transmission pipeline and related improvements. The Bypass Pipeline Modification would be located underground and would not be visible upon completion of construction. Moreover, proposed above ground improvements (i.e., de-chlorination facility) would be constructed on an existing developed site known as the Paralta well site, which is currently improved with water infrastructure improvements. The proposed de-chlorination facility would be designed to be visually compatible with the surrounding environment. Moreover, the final design of the proposed de-chlorination facility would be conducted in consultation with the City of Seaside consistent with prior modifications. Similarly, the Proposed Modification to the existing water treatment facility at the Santa Margarita site would not result in any aesthetic-related impacts since the proposed de-chlorination improvements would be located within the existing footprint of the water treatment facility. This impact would, therefore, be less-than-significant.

d) Less than Significant Impact. The Proposed Modification would result in the construction and operation of additional water supply infrastructure within a previously developed/disturbed area. As noted above, the modification would be located within the existing paved portions of General Jim Moore Boulevard and on previously developed sites that are improved with existing water supply infrastructure. The construction and operation of the Proposed Modification is not anticipated to increase the amount of additional lighting and glare within the surrounding area, as no exterior lighting is proposed for the de-chlorination facility. As a result, the Proposed Modification would not result in any additional sources of lighting and/or glare. This represents a less than significant effect and no mitigation is warranted.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to aesthetics.

2. Agricultural Resources

EXISTING SETTING

The Proposed Modification site and its surrounding area do not contain agricultural or forest lands.

CHECKLIST

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- No impacts to agricultural resources were identified in the ASR EIR/EA.
- No impacts to agricultural resources were identified in Addendum No. 1 to the ASR EIR/EA resulting from the implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any potentially significant impacts to agricultural resources resulting from the construction and operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any potentially significant impacts to agricultural resources related to the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any potentially significant impacts to agricultural resources related to the Backflush Basin Expansion.

- Addendum No. 5 to the ASR EIR/EA did not identify any potentially significant impacts to agricultural resources related to the Water Treatment Facility Modification.

DISCUSSION

a-e) No Impact. The location of the Proposed Modification and its surrounding area does not contain agricultural or forest lands. As a result, the Proposed Modification would not convert prime, unique, or farmland of statewide importance to non-agricultural use or involve any other changes that would result in the conversion of farmland, impact a Williamson Act contract, or disrupt any agricultural operations (Monterey County, 2010a). Moreover, the Proposed Modification would not convert forest land or timberland or involve any other changes that would result in the conversion or loss of forest land.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to agricultural resources.

3. Air Quality

EXISTING SETTING

The Proposed Modification would be in the North Central Coast Air Basin (Air Basin). The Air Basin covers an area of 5,159 square miles along the central coast of California and is generally bounded by the Monterey Bay to the west, the Santa Cruz Mountains to the northwest, the Diablo Range on the northeast (Denise Duffy and Associates, 2015).

The modification area typically has average maximum and minimum winter (i.e., January) temperatures of 60 degrees Fahrenheit (°F) and 43 °F, respectively, while average summer (i.e., July) maximum and minimum temperatures are 68 °F and 52 °F, respectively. The proposed project site is within close proximity to the coast with temperature variations that are relatively moderate. Precipitation at the site averages approximately 20 inches per year (Denise Duffy and Associates, 2015).

The Monterey Bay Air Resources District (MBARD) is the regional agency tasked with managing air quality in the region. Existing levels of air pollutants in the area can generally be inferred from ambient air quality measurements conducted by MBARD at its closest station, the Salinas #3 monitoring station, located in the City of Salinas, east of East Laurel Drive and south of Constitution Boulevard. Data monitored at this station shows that although the area currently does not meet state standards for ozone, the number of days per year in exceedance of ozone standards has been decreasing, and the region is on course to meet these standards in the future.

CHECKLIST

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified less than significant impacts during construction due to short-term emissions of PM₁₀, exposures of sensitive receptors (e.g. Seaside Middle School) to elevated health risks from exposure to diesel particulates, and exposure of sensitive receptors to acrolein health hazards. No significant operational air quality impacts were identified.
- Addendum No. 1 to the ASR EIR/EA did not identify any potentially significant impacts related to air quality resulting from construction or operation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA identified a potentially significant impact related to the exposure of sensitive receptors to pollutants during construction of the Hilby Pump Station. This impact could be mitigated to a less than significant level with the implementation of *Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan*¹ from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.
- Addendum No. 3 to the ASR EIR/EA did not identify any potentially significant impacts related to air quality resulting from the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any potentially significant impacts related to air quality resulting from the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any potentially significant impacts related to air quality resulting from the Water Treatment Facility Modification.

DISCUSSION

Emissions would be generated during construction of the Proposed Modification from the operation of construction equipment and site grading. In addition, the Proposed Modification would also result in potential operational air quality emissions associated with the operation of the proposed de-chlorination facility.

¹ Addenda No. 2 and No. 3 to the ASR EIR/EA were joint documents that amended both the ASR EIR/EA and the Pure Water Monterey Groundwater Replenishment Project (PWM) EIR. For this reason, mitigation measures from the PWM EIR were used to mitigate impacts resulting from those projects. However, the modification covered under this Addendum is not subject to the PWM EIR or associated with this project; mitigation measures from the PWM EIR are not applicable to the Proposed Modification.

a) Less than Significant Impact: CEQA Guidelines Section 15125(b) requires that a project be evaluated for consistency with applicable regional plans, including the Air Quality Management Plan (AQMP). The MBARD is required to update their AQMP once every three years; the most recent update (MBARD, 2017) was approved in March of 2017. This plan addresses attainment of the State ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG) and other indicators. Consistency determinations are issued for commercial, industrial, residential, and infrastructure related projects that have the potential to induce population growth. A project is considered inconsistent with the AQMP if it has not been accommodated in the forecast projections considered in the AQMP. The Proposed Modification would not cause and/or otherwise induce population growth. In addition, due to lack of operational emissions, it would not cause any long-term adverse air quality effects. As a result, the proposed project would not conflict with and/or otherwise obstruct the implementation of MBARD's AQMP. For these reasons, the proposed project would have a less than significant impact related to conflicts with air quality plans.

b) Less than Significant Impact: The MBARD 2016 CEQA Air Quality Guidelines (Guidelines) contains standards of significance for evaluating potential air quality effects of projects subject to the requirements of CEQA. According to MBARD, a project will not have a significant air quality effect on the environment, if the following criteria are met:

Construction of the project will:

- Emit (from all sources, including exhaust and fugitive dust) less than;
 - 137 pounds per day of oxides of nitrogen (NO_x);
 - 137 pounds per day of reactive organic gases (ROG);
 - 82 pounds per day of respirable particulate matter (PM₁₀);
 - 55 pounds per day of fine particulate matter (PM_{2.5}); and,
 - 550 pounds per day carbon monoxide (CO).

Operation of the project will:

- Emit (from all project sources, mobile, area, and stationary) less than;
 - 137 pounds per day of oxides of nitrogen (NO_x)
 - 137 pounds per day of reactive organic gases (ROG)
 - 82 pounds per day of PM₁₀
 - 55 pounds per day of PM_{2.5}
 - 550 pounds per day carbon monoxide (CO)
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard;
- Not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment;
- Not exceed the health risk public notification thresholds adopted by the MBARD;
- Not create objectionable odors affecting a substantial number of people; and,
- Be consistent with the adopted federal and state Air Quality Plans (MBAPCD, 2016).

The MBARD CEQA Guidelines for evaluating impacts during construction state that if a project generates less than 82lb/day of PM₁₀ emissions, the project is considered to have less than significant impacts (see Table 5-1, MBARD, 2016). The Guidelines also state that a project will result in less than significant impacts if daily ground-disturbing activities entail less than 8.1 acres of minimal earthmoving, or less than 2.2 acres of grading and excavation per day. Construction projects below these acreage thresholds would be below

the applicable MBARD 82 lb/day threshold of significance and would constitute a less than significant effect for the purposes of CEQA (MBARD, 2016). The Proposed Modification is not anticipated to generate more than 2.2 acres of grading and excavation per day or 8.1 acres of minimal earthmoving per day (Lawrence Tam, AECOM, personal communication, June 2020). As a result, the Proposed Modification would result in a less than significant construction-related air quality effect.

The Proposed Modification would result in temporary increases in emissions of inhalable particulates (PM_{2.5} and PM₁₀), VOC, and NO_x associated with construction-related activities, see **Table 1. Construction Air Quality Emissions** below for detailed information on these emissions. See **Attachment 2, Air Quality and GHG Calculations Spreadsheets** for more information. Construction-related fugitive dust emissions associated with the Proposed Modification would be generated from site grading and construction. In addition to construction-related fugitive dust, exhaust emissions associated with construction vehicles and equipment would also be generated.

Table 1. Construction Air Quality Emissions

	Emissions in Pounds/Day			
	NO _x	PM _{2.5}	PM ₁₀	ROG
Significance Threshold (MBARD)	137*	55	82	137*
Emissions generated by the Project	2.56	0.14	0.15	0.27
Exceed Threshold?	No	No	No	No
Emissions Source: Attachment 2, Air Quality and GHG Calculations Spreadsheets Significance Threshold Source: MBARD, 2016 * Applies to non-typical construction equipment (i.e., well drilling) MBARD has identified that construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO _x), are accommodated in the emission inventories of State- and federally-required air plans. Temporary emissions associated with the operation of construction equipment have been accommodated in State- and federally-required air plans.				

The construction emissions generated by the Proposed Modification would not overlap with construction of other components of the ASR Project because all physical components of that project have already have been constructed, therefore the emissions associated with the construction of this modification would not add to the construction emissions of the ASR Project, and would not increase the severity of Impacts AQ-1, AQ-2, AQ-3, AQ-4, or AQ-5 identified in the ASR EIR/EA. Construction would last approximately eight months. As shown in **Table 1. Construction Air Quality Emissions**, construction of the Proposed Modification would not exceed MBARD thresholds for emissions. As a result, the Proposed Modification would not result in a new or substantially more severe significant impact due to air quality emissions during construction.

The Proposed Modification would result in operational air quality emissions associated with the operation of the proposed de-chlorination facility. **Table 2. Operational Air Quality Emissions** identifies anticipated operational air quality emissions for the Proposed Modification. The increase in operational emissions associated with the modification would not increase the severity of impacts AQ-1, AQ-2, AQ-3, AQ-4, or AQ-5 identified in the ASR EIR/EA. Moreover, all operational emissions would be below applicable MBARD thresholds of significance. As a result, the Proposed Modification would not result in emissions that would result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA based on an exceedance or violation of the applicable air quality standards.

Table 2. Operational Air Quality Emissions

	Emissions in Pounds/Day			
	NO _x	PM _{2.5}	PM ₁₀	ROG
Significance Threshold (MBARD)	137*	55	82	137*
Emissions generated by the Project	4.23	0.23	0.25	0.52
Exceed Threshold?	No	No	No	No
Emissions Source: Attachment 2, Air Quality and GHG Calculations Spreadsheets Significance Threshold Source: MBARD, 2016 * Applies to non-typical construction equipment (i.e., well drilling) MBARD has identified that construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NO _x), are accommodated in the emission inventories of State- and federally-required air plans. Temporary emissions associated with the operation of construction equipment have been accommodated in State- and federally-required air plans				

c) Less than Significant Impact: The nearest sensitive receptors to the Proposed Modification are approximately 75 feet from the Proposed Modification (i.e. de-chlorination facility). The Proposed Modification could create temporary construction dust given the proximity of the nearest residences. Implementation of the following standard construction best management practices (BMPs) would minimize temporary emissions from construction:

- 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 and non-stormwater runoff.
- Prohibit grading activities during periods of high wind (over 15 mph).
- Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard.
- Hand sweep daily within paved areas.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Enclose, cover, or water daily exposed stockpiles (dirt, sand, aggregate, etc.).
- Replant vegetation in disturbed areas as quickly as possible.
- Provide stabilized construction entrances/exits to limit sediment tracking from the site.

With implementation of the above BMPs, construction of the Proposed Modification would result in a less than significant impact to sensitive receptors.

d) No Impact. No substantial odors would be emitted from the proposed improvement site based upon the type of construction activities and project operations proposed.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to air quality resources.

4. Biological Resources

EXISTING SETTING

The Proposed Modification is located within the paved portions of General Jim Moore Boulevard, between Hilby Avenue and approximately 750 feet south of Coe Avenue, the Peralta well site, and the Santa

Margarita site (improvements at the Santa Margarita site would occur entirely within the existing footprint of the water treatment facility located at that site). The Paralta well site consists of an area previously improved with existing water supply infrastructure. The Proposed Modification at the Paralta well site is a de-chlorination facility that would tie into an existing ASR pipeline and existing water transfer pipeline adjacent to the southbound lane of General Jim Moore Boulevard, just south of the intersection with Coe Avenue. Additionally, part of the modification includes the use of a soil deposition site. Some minor earthwork would be necessary to accommodate construction of the Proposed Modification, although the majority of these activities would be limited to developed areas, devoid of vegetation. Proposed Modifications will occur at two areas that are not developed; the tie in connections for the de-chlorination facility and the soil deposition site adjacent to Mescal Street near the intersection with Plumas Avenue. Vegetation at the tie-in site for the de-chlorination is classified as ruderal and is dominated by iceplant (*Carpobrotus edulis*). Other non-dominant species identified within the tie-in site include broadleaf filaree (*Erodium botrys*), riggut brome (*Bromus diandrus*), ribwort plantain (*Plantago lanceolata*), French broom (*Genista monspessulana*). Focused botanical surveys were conducted at the tie-in site during the spring of 2020 and no special-status plant species were identified (see **Attachment 3**). Vegetation within the Mescal Street soil deposition area would also be classified as ruderal with dominant species including field mustard (*Brassica rapa*), red sandspurry (*Spergularia rubra*), broad stem filaree, telegraph weed (*Heterotheca grandiflora*), and California croton (*Croton californicus*). Special-status plant species, including sandmat mazanita (*Arctostaphylos pumila*), Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Monterey ceanothus (*Ceanothus rigidus*), and Kellogg’s horkelia (*Horkelia cuneatus* var. *sericea*) were identified adjacent to the soil deposition area. Avoidance and minimization measures have been included below to ensure that these species are not impacted as a result of the Proposed Modification.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified less than significant impacts for removal and destruction of sensitive vegetation and potential direct mortality or disturbance of protected animal species. The ASR EIR/EA identified significant impacts related to potential disturbance of the Fort Ord Natural Resource Management Area (NRMA) and potential loss of nest trees and disturbance or mortality of migratory birds. *Mitigation Measures BIO-1: Minimize or Prevent Disturbance to Adjacent NMRA and BIO-2: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15)* was identified and implemented to reduce impacts to a less than significant level. The ASR EIR/EA noted that the ASR Project has the potential to affect special status aquatic species within the river corridor of the Carmel River, but has been designed to minimize any adverse impacts. *Mitigation Measures AR-1: Conduct Annual Survey Below River Mile 5.5 and Monitor River Flow in January-June Period, and AR-2: Cooperate to help develop a Project to Maintain, Recover, or Increase Storage in Los Padres Reservoir and If Needed, Continue Funding Program to Rescue and Rear Isolated Juveniles* were identified in the ASR EIR/EA in association with potential impacts to flows for upstream migration and potential impacts to juvenile steelhead rearing habitat. Potential benefits to steelhead and California red-legged frog include the reduction of groundwater pumping along the Carmel River in the dry summer months from the use of the Seaside Groundwater Basin for municipal supply. The net effect of these operational changes will likely increase streamflow and improve environmental conditions along the Carmel River. Thus, the ASR EIR/EA concluded that the ASR Project would be beneficial to steelhead and the California red-legged frog.
- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts to biological resources resulting from implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA identified a potentially significant impact during construction of the Hilby Pump Station related to impacts to Monterey spineflower, a federally threatened species. This impact could be reduced to less than significant levels with the implementation of *Mitigation Measure BT-1a: Implement Construction Best Management Practices* from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.
- Addendum No. 3 to the ASR EIR/EA identified a potentially significant impact resulting from impacts to nesting birds during construction of the Monterey Pipeline. This impact could be mitigated to less than significant levels with the implementation of *Mitigation Measures BT-1a: Implement Construction Best Management Practices, BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark, and, BT-1m: Minimize Effects of Nighttime Construction Lighting* from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.

- Addendum No. 4 to the ASR EIR/EA did not identify any potentially significant impacts resulting from the construction of the backflush basin modification.
- Addendum No. 5 to the ASR EIR/EA did not identify any potentially significant impacts resulting from the construction of the Water Treatment Facility Modification.

DISCUSSION

a) Less than Significant Impact: Construction of the Proposed Modification would not result in any new significant impacts to species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. As noted above, the Proposed Modification is located primarily within existing developed/disturbed areas (i.e., existing paved roadway and previously developed sites with existing water supply infrastructure) that provide low quality habitat for any potential special-status species.

Soil deposition could result in permanent loss of several populations of special-status plant species including sandmat mazanita, Monterey spineflower, Monterey ceanothus, and Kellogg's horkelia. Fencing or flagging will be installed as part of the Proposed Modification, as described above, to limit soil deposition to the areas where special-status plant species were not identified. The avoidance of these special-status species will reduce any potential impacts to a less than significant level and no additional mitigation would be warranted.

Construction of the Proposed Modification has the potential to result in direct mortality or disturbance of black legless lizard (*Anniella pulchra nigra*). The Proposed Modification is located within an area that was identified as suitable black legless lizard habitat in the Flora and Fauna Baseline Study of Fort Ord (U.S. Army Corps of Engineers 1992). Soil deposition at the Mescal Street soil deposition site and construction of the de-chlorination tie-ins have the potential to result in direct mortality or disturbance of black legless lizard. The ASR EIR/EA identified that direct mortality of black legless lizards would be considered a significant impact because the subspecies is rare in California, with a distribution that is restricted to coastal areas in the Monterey Bay region (Stebbins 2003). However, development and implementation of the HMP has provided adequate mitigation for potential impacts to the black legless lizard. Therefore, the ASR EIR/EA determined this impact is less than significant. As a result, the Proposed Modification is not anticipated to result in any additional impacts beyond those previously identified in the ASR EIR/EA.

The Proposed Modification could also result in potential impacts to avian species due to construction-related activities, although potential impacts would be minimal given that the modification is located within previously disturbed/developed areas. As a result, potential impacts to avian species would generally be limited. For instance, the modification could result in potential impacts during construction if construction activities occur close to an occupied nest during the nesting period for migratory birds. This could result in nest abandonment and death of young or loss of reproductive potential at active nests located in the immediate vicinity of construction activities.

To avoid potential impacts to avian species, a pre-construction survey for active nests would be conducted by a qualified biologist prior to construction if construction commences between February 15 and September 1. A qualified biologist shall be retained by the project proponents to conduct pre-construction surveys for nesting raptors and other protected avian species where nesting habitat is identified and within a suitable buffer area if construction commences between February 15 and September 1. Pre-construction surveys shall be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because

some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue 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. If active raptor or other protected avian species nests are identified during the preconstruction surveys, the qualified biologist shall notify the project proponents and an appropriate no-disturbance buffer shall be imposed within which no construction activities or disturbance shall take place until the young have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

b) No Impact: The Proposed Modification is located within a previously disturbed/developed area or areas consisting of ruderal/weedy vegetation; therefore, no sensitive natural communities occur and none are planned for removal. Additionally, there is no riparian habitat in the vicinity of the modification site. As a result, this project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

c) No Impact: There are no federally protected wetlands within the modification site; therefore, there are no impacts to this sensitive habitat as a result of the construction of the Proposed Modification.

d) No Impact: With the possible exception of nesting birds and raptors addressed in a) above, the Proposed Modification will not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e, f) Less than Significant Impact: The Proposed Modification would not conflict with local policies protecting biological resources. No tree removal would be associated with the Proposed Modification. The modification site is located within the boundaries of the adopted HMP and is being constructed in compliance with the Conditions of the HMP. This is consistent with the Draft ASR EIR/EA.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to biological resources.

5. Cultural Resources

EXISTING SETTING

A records search at the Northwest Information Venter of the California Historical Resources Information System (CHRIS) was conducted in 2005 as part of the preparation of the ASR EIR/EA. A review of all of the archaeological sites and surveys within 0.5 mile of the site, historical maps, and the Historic Resources Index was performed. Additionally, historic maps for the site, the National Register of Historic Places, and the California Register of Historical Resources were consulted. The records search at CHRIS did not result in the identification of any previously recorded prehistoric or historic resources within 0.5 mile of the site. The closest prehistoric archaeological site, CA-MNT-699, is in the coastal dunes.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA found a potentially significant impact due to the potential for discovery of buried unknown cultural deposits and human remains during construction activities; however, *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*, were presented and adopted to reduce potential impacts to a less than significant level.
- Addendum No. 1 to the ASR/EA came to the same conclusion as the ASR EIR/EA. Potentially significant impacts could result from the potential for discovery of buried unknown cultural deposits and human remains during construction activities. These impacts could be reduced to less than significant with the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*.
- Addendum No. 2 to the ASR ER/EA also identified a potentially significant impact during construction of the Hilby Pump Station due to the potential for discovery of buried unknown cultural deposits and human remains during construction activities. These impacts could be reduced to less than significant with the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*.
- Addendum No. 3 to the ASR EIR/EA also identified a potentially significant impact during construction of the Monterey Pipeline Re-Alignment due to the potential for discovery of buried unknown cultural deposits and human remains during construction activities. These impacts could be reduced to less than significant with the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*.
- Addendum No. 4 to the ASR EIR/EA also identified a potentially significant impact during construction due to the potential for discovery of unknown archaeological resources and human remains during construction activities. These impacts could be reduced to less than significant with the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*.
- Addendum No. 5 to the ASR EIR/EA also identified a potentially significant impact during construction due to the potential for discovery of unknown archaeological resources and human remains during construction activities. These impacts could be reduced to less than significant

with the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction Activities* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities*

DISCUSSION

a) No Impact: The Proposed Modification would not impact historic resources; there are no documented historical resources on the Proposed Modification site or in the vicinity of the site.

b) Less than Significant Impact with Mitigation: Ground disturbing activities could potentially unearth unknown archaeological resources. However, there is a low possibility of archaeological resources to be present due to the developed nature of the modification site. While previously unknown or buried archaeological resources are not anticipated to be encountered during construction, the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction* and *CR-2: Stop Work If Human Remains Are Encountered during Construction Activities*, previously adopted as part of the ASR EIR/EA and described below, would ensure that potential impacts due to the discovery of previously unknown archaeological resources would be less than significant. As a result, the Proposed Modification would not result in any new or substantially more severe significant impacts beyond those identified in the ASR EIR/EA. No additional mitigation would be necessary beyond those measures already identified and provided below.

c) Less than Significant Impact with Mitigation: Implementation of the Proposed Modification would not be expected to disturb human remains due to the developed nature of the modification site and due to the lack of previously identified human remains in the vicinity. In the unlikely event that human remains are discovered during earthmoving activities, *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction* and *CR-2: Stop Work If Human Remains Are Encountered during Construction Activities*, previously approved as part of the ASR EIR/EA and described below, would reduce the potential impact to a less than significant level. The Proposed Modification would not result in any new or more severe significant impacts than those identified in the ASR EIR/EA. No additional mitigation would be necessary beyond those identified.

MITIGATION MEASURES

Mitigation Measure CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction Activities.

If buried cultural resources such as chipped stone or ground stone, historic debris, building foundations, or human bone are inadvertently discovered during ground-disturbing activities, the construction contractor will stop work in that area and within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Treatment measures typically include avoidance strategies or mitigation of impacts through data recovery programs such as excavation or detailed documentation.

Mitigation Measure CR-2: Stop Work If Human Remains Are Encountered during Construction Activities.

If human skeletal remains are encountered, the construction contractor will notify CalAm and the county coroner immediately. CalAm will ensure the construction specifications include this order.

If the county coroner determines that the remains are Native American, the coroner will be required to contact the NAHC (pursuant to Section 7050.5 [c] of the California Health and Safety Code) and the County Coordinator of Indian Affairs. A qualified archaeologist will also be contacted immediately.

If human remains are discovered in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the coroner of the county has been informed and has determined that no investigation of the cause of death is required; and
- if the remains are of Native American origin:
 - the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of with appropriate dignity the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98; or
 - the NAHC was unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the commission.

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to cultural resources. Because the modification could potentially contribute to previously identified significant impacts to unknown cultural resources the implementation of *Mitigation Measures CR-1: Stop Work If Buried Cultural Deposits are Encountered during Construction* and *CR-2: Stop Work If Human Remains are Encountered during Construction Activities* from the previously approved ASR EIR/EA is necessary to ensure impacts would remain less-than-significant consistent with the findings of the ASR EIR/EA. The implementation of these mitigation measures would ensure that the Proposed Modification would not result in any additional environmental effects beyond those previously identified in the ASR EIR/EA.

6. Energy

EXISTING SETTING

Gas and electric service in the region is provided by Pacific Gas and Electric Company (PG&E). PG&E operates a grid distribution system that transmits electricity with a vast network of transmission and distribution lines throughout the service area to the users. The primary source is Dynegy Moss Landing Plant, which generates more than 1,060 megawatts (mw).

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project: a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA did not specifically evaluate energy related effects as a separate CEQA topic because at the time the ASR EIR/EA was prepared the CEQA Guidelines had not been updated to require a separate evaluation of these resources. The ASR EIR/EA did, however, evaluate potential energy related impacts within the context of potential impacts to utilities and service systems, as well as within the context of potential significant irreversible environmental changes. The ASR EIR/EA concluded that the proposed ASR project would not result in the wasteful, uneconomical, and unnecessary use of energy. The ASR EIR/EA concluded that there is adequate capacity to accommodate the ASR project without affecting existing services.
- Similarly, Addenda No. 1 through No. 4 did not specifically consider energy related effects because at the time the addenda were prepared, the CEQA Guidelines had not been updated to require a separate evaluation of energy demand. Nevertheless, those addenda considered potential impacts within the context of potential impacts to utilities and services system, and did not identify any additional environmental effects beyond those identified in the ASR EIR/EA.
- Addendum No. 5 to the ASR EIR/EA did not identify any potentially significant energy related effects resulting from the construction or operation of the Water Treatment Facility Modification.

DISCUSSION

a, b) Less than Significant Impact: The Proposed Modification would not result in a potential significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation of the project. Moreover, the Proposed Modification would also not result in a potential significant impact due to potential conflicts with state or local plans for renewable energy or energy efficiency. The Proposed Modification consists of improvements to the ASR Project and is a critical component of water supply infrastructure serving the region. Accordingly, the Proposed Modification does not entail the wasteful or inefficient use of energy. Moreover, given the nature of the Proposed Modification it is also not anticipated to conflict with any goals related to renewable energy production or energy efficiency. The final design of the Proposed Modification (i.e., de-chlorination facility) will take into consideration potential energy usage and will be designed to minimize energy demand where appropriate. This represents a less than significant impact.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to energy consumption.

7. Geology and Soils

EXISTING SETTING

Pacific Crest Engineering, Inc. prepared a Geotechnical Investigation for the Santa Margarita site in 2009 in preparation for construction of the electrical building. In addition, Pacific Crest Engineering, Inc. prepared an updated analysis in February 2018 that evaluated the proposed backflush basin expansion project, which was evaluated in Addendum No. 4. The findings of the updated analysis were generally consistent with the findings of the prior investigations completed by Pacific Crest Engineering. Since those prior investigations generally described the existing geologic setting in the vicinity of the Proposed Modification, the findings of those prior analyses are considered relevant and applicable for the purposes of this Addendum. The United States Geological Survey’s (USGS’s) soil survey for Monterey County indicated that site soils consist of Baywood sand, Arnold loamy sand, and Rindge muck, which consist of older coastal dunes, and are described as weakly consolidated, poorly grading fine to medium grained sand deposits. This information is consistent with the findings of Pacific Crest Engineering’s previous analyses.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA found that all geologic, soils, and seismicity impacts of the ASR Project would be less than significant.
- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts related to geology and soils.
- Addendum No. 2 did not identify any significant impacts related to geology and soils resulting from the construction or operation of the Hilby Pump Station.
- Addendum No. 3 did not identify any significant impacts related to geology and soils resulting from the Monterey Pipeline Re-Alignment.
- Addendum No. 4 did not identify any significant impacts related to geology and soils resulting from the Backflush Basin Expansion.
- Addendum No. 5 did not identify any significant impacts related to geology and soils resulting from the Water Treatment Facility Modification.

DISCUSSION

a, b, c) Less than Significant Impact: The Proposed Modification is located in a seismically active region and therefore it is reasonable to expect that the modification would be exposed to significant seismic shaking during the lifetime of the Proposed Modification. Since the nearest known active or potentially active fault is mapped approximately 3.1 miles from the site, the potential for ground surface fault rupture is low. Based on review of regional liquefaction maps, the site is in an area classified as having a low potential for liquefaction. Additionally, the potential for lateral spreading is also considered low. There is also a low probability for seismically induced landsliding because the site is relatively flat and improved with existing infrastructure (i.e., roadways and water supply infrastructure). As a result, this is considered a less than significant impact. Moreover, the final design of the Proposed Modification will be required to comply with the recommendations of a design-level geotechnical analysis which will further ensure that all potential geologic related hazards will be less than significant.

d, e, f) No Impact: The Proposed Modification is not located on expansive soils and does not involve septic or alternative wastewater disposal systems. Moreover, based on the lack of previously identified paleontological resources on the site or in the vicinity of the site, there are no known paleontological resources that would be disturbed by implementation of the Proposed Modification.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to geology and soils.

8. Greenhouse Gas Emissions

EXISTING SETTING

Global temperatures are affected by naturally occurring and anthropogenic-generated atmospheric gases, such as water vapor, carbon dioxide, methane, and nitrous oxide (Intergovernmental Panel on Climate Change, 2007). Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). Solar radiation enters the earth's atmosphere from space, and a portion of the radiation is absorbed at the surface. The earth emits this radiation back toward space as infrared radiation. Greenhouse gases, which are mostly transparent to incoming solar radiation, are effective in absorbing infrared radiation and redirecting some of this back to the earth's surface. As a result, this radiation that otherwise would have

escaped back into space is now retained, resulting in a warming of the atmosphere. This is known as the greenhouse effect. The greenhouse effect helps maintain a habitable climate. Emissions of GHGs from human activities, such as electricity production, motor vehicle use, and agriculture, are elevating the concentration of GHGs in the atmosphere, and are reported to have led to a trend of unnatural warming of the earth’s natural climate, known as global warming or global climate change.

Climate change is a cumulative impact; a project contributes to this impact through its incremental contribution of GHG emissions combined with the cumulative increase of all other sources of GHGs. The MBARD’s GHG threshold is defined in terms of carbon dioxide equivalent (CO₂e), a metric that accounts for the emissions from various GHGs based on their global warming potential. If annual emissions of GHGs exceed these threshold levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and must implement mitigation measures.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA did not contain an analysis of GHG emissions and climate change, because at the time the ASR EIR/EA was prepared, AB32, the Global Warming Solutions Act and associated updates to the CEQA statutes and guidelines were not in effect. Although an analysis of potential climate change impacts was not completed as part of the ASR EIR/EA, air quality modeling was completed for temporary construction phase impacts. All potential air quality related effects associated with the ASR Project were considered less than significant due to the temporary nature of project emissions.
- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts related to the generation of GHGs resulting from the implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any significant impacts related to the generation of GHGs during construction of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify a significant impact related to the generation of GHGs resulting from the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify a significant impact related to the generation of GHGs resulting from the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify a significant impact related to the generation of GHGs resulting from the Water Treatment Facility Modification.

DISCUSSION

a) Less Than Significant Impact: The MBARD determined that if a project emits less than 10,000 metric tons per year (MT/yr) CO₂e that its impact will be less than significant. This calculation is made by

combining the estimated greenhouse gas emissions generated by construction, amortized over a 30-year period, with the estimated annual GHG emissions resulting from operation of the project.

Construction of the Proposed Modification would result in a one-time emission total of up to 60.94 MT/yr of CO₂e during the 8-month construction period; therefore, the annual amortized GHG emissions for the construction phase is 2.02 MT/year. The estimated annual greenhouse gas emissions generated by operation of the Proposed Modification would be approximately 156.13 MT/year. Therefore, the estimated annual emissions for the modification is 158.15 MT/year. This falls well below the threshold of 10,000 MT/year and is therefore considered to be less than significant.

b) No Impact: The Proposed Modification would not conflict with any plan, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions. AB32 recommends conjunctive groundwater use projects, such as ASR, as a key strategy for reducing the demand for more energy intensive water supply sources.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to greenhouse gas emissions.

9. Hazards and Hazardous Materials

EXISTING SETTING

The Proposed Modification is located within the boundaries of the former Ford Ord, which is an active superfund site pursuant to Government Code Section 65962.5. The former Fort Ord was historically used for military training. Because of the former military use, munition response action was completed to remove Department of Defense (DoD) military munitions, many of which were determined upon evaluation by qualified personnel to be Munitions and Explosives of Concern (MEC). Even with completion of munitions response actions, there is potential for munitions to be encountered. Although the probability of encountering MEC at the modification site is considered low given the developed nature of the modification site. No other contaminated cleanup sites are located within the vicinity of the modification (California Department of Toxic Substances Control, 2016). Seaside Middle School is located approximately 0.2 miles from the Proposed Modification Additionally, Ord Terrace Elementary School is approximately 0.3 miles from the Proposed Modification, Martin Luther King Jr. School of the Arts is approximately 0.2 miles from the Proposed Modification, and Highland Elementary School is approximately 0.2 miles from the Proposed Modification.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project: involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA evaluated hazardous materials impacts of the project and concluded there to be a potentially significant impact related to construction activities occurring on portions of the former Fort Ord associated with historic military use. *Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site* was identified to reduce the potential impact to a less than significant level. The ASR EIR/EA identified less than significant impacts associated with handling of associated materials and public exposure to contaminated drinking water.
- Addendum No. 1 to the ASR EIR/EA did not identify any potentially significant impacts related to hazards and hazardous materials.
- Addendum No. 2 to the ASR EIR/EA did not identify any potentially significant impacts related to hazards and hazardous materials from the construction or operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any potentially significant impacts related to hazards and hazardous materials from the implementation of the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA identified potentially significant impacts due to the project site’s being located within an area that formerly contained live-firing ranges for various weapons. *Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site* was identified to reduce the potential impact to a less than significant level.
- Addendum No. 5 to the ASR EIR/EA identified potentially significant impacts due to the Water Treatment Facility being located within an area that formerly contained live-firing ranges for various weapons. *Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading*

and Construction Activities at the Project Site was identified to reduce the potential impact to a less than significant level.

DISCUSSION

a, b) Less than Significant Impact: The Proposed Modification would entail the use of hazardous materials during construction and operation. The use of hazardous materials during construction and operation could create a potential hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Moreover, the use of hazardous materials during construction and operation could create a potential hazard to the public through the accidental release of hazardous materials. While hazardous material usage would occur during construction and operation, these effects would be less than significant.

During construction, typical construction equipment fluids, including gasoline, diesel, and lubricants for maintaining equipment may be stored onsite. These materials would be handled and stored in compliance with all local, State, and Federal regulations pertaining to hazardous materials. The temporary usage of these materials during project construction would be reduced through standard construction best management practices and implementation of a Storm Water Pollution Prevention Plan. This would ensure that potential construction-related effects would remain less than significant.

Operation of the Proposed Modification (i.e., de-chlorination facility modification) could involve the storage and use of hazardous chemicals. The ASR EIR/EA previously considered potential operational impacts during operation of the ASR project. As identified in the ASR EIR/EA, the potential effects would be addressed through the implementation of an operation and maintenance and a chemical handling and emergency response plan. Moreover, these effects would be further reduced through the implementation of a hazardous materials management plan, as required by the County of Monterey. The implementation of these requirements identified in the ASR EIR/EA would ensure that impacts would remain less than significant.

c) Less than Significant Impact: The Proposed Modification is located approximately 0.2 miles from Seaside Middle School, Martin Luther King Jr. School of the Arts, and Highland Elementary School. Additionally, Ord Terrace Elementary School is located approximately 0.3 miles from the modification. However, construction and implementation of the proposed project would not result in exposure of the students or staff to hazardous materials, substances, or wastes. All applicable regulations and policies relevant to hazardous materials transportation and storage would be adhered to. This is a less than significant impact.

d) Less than Significant Impact with Mitigation: The Proposed Modification is located within an area that was previously used by the U.S. Army, therefore soil disturbance from excavating and grading activities could expose construction workers to hazards. This impact could be reduced to a less than significant level with the implementation of *Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site*. The implementation of Mitigation Measure HAZ-1 would ensure that potential impacts associated with the Proposed Modification would be consistent with the findings of the ASR EIR/EA. No further mitigation measures would be necessary.

e) No Impact: The Proposed Modification is not located within two miles of a municipal or private airport. Therefore, no impacts would result due to airport related safety hazards.

f) Less than Significant Impact: Implementation of the Proposed Modification would not interfere with evacuation plans because the Proposed Modification would implement traffic control measures to ensure

adequate access during construction. Therefore, the Proposed Modification would not result in a significant impact. All impacts would remain less-than-significant.

g) Less than Significant Impact: The Proposed Modification is primarily surrounded by developed and undeveloped lands. While there is potential for wildland fires in such a land use type, the Proposed Modification would not increase the risk of wildfires to residents because construction of the modification would not involve any equipment or activities that present a severe fire risk. Implementation of the Proposed Modification would not further expose people or structures to wildland fires.

MITIGATION MEASURE

Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site.

Because of the Proposed Modification’s location, the following safety precautions are required for onsite activities. The requirements may be modified upon completion of the Munitions Response Remedial Investigation/Feasibility Study (MR RI/FA) process for the munitions response sites.

- All personnel accessing the proposed site will be training in MEC recognition. This safety training is provided by the Army at no cost to the trainee.
- If an item is discovered that is or could be MEC, it shall not be disturbed. The item shall be reported immediately to the Presidio of Monterey Police Department at 831-242-7851 so that appropriate U.S. Military explosive ordinance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations at the expense of the Army.
- Ground disturbing activities, including perimeter fence installation, will be coordinated with the U.S. Army Corps of Engineers Unexploded Ordinance Safety Specialist so that appropriate construction-related precautions may be provided.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to hazards and hazardous materials. Because the Proposed Modification could potentially contribute to previously identified significant impacts related to hazardous materials, the implementation of *Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site*, from the previously approved ASR EIR/EA is necessary to ensure that impacts would remain less than significant consistent with the findings of the ASR EIR/EA.

10. Hydrology and Water Quality

EXISTING SETTING

The proposed Bypass Pipeline is located within the existing paved roadway of General Jim Moore Boulevard and de-chlorination site is located on a developed site that is relatively flat with an elevation of approximately 334 feet above sea level. The modification site consists of paved roadway and impervious surfaces. Storm runoff from the site currently is directed into stormwater drains, which would be lined with runoff control, per the Stormwater Pollution Prevention Plan (SWPPP). Additionally, BMPs would be installed to reduce the amount of runoff.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) result in substantial erosions or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified less than significant and beneficial hydrology and water quality impacts of the ASR project.
- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts related to hydrology and water quality resulting from the implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any significant impacts related to hydrology and water quality resulting from the construction or operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any significant impacts related to hydrology and water quality resulting from implementation of the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any significant impacts related to hydrology and water quality resulting from implementation of the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any significant impacts related to hydrology and water quality resulting from implementation of the Water Treatment Facility Modification.

DISCUSSION

a) Less Than Significant Impact: The Proposed Modification may be subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and the Municipal Stormwater Permit

requirements (including the preparation of a SWPPP). The Proposed Modification will comply with all applicable water quality standards and waste discharge requirements to the extent they are applicable to the modification. As a result, the Proposed Modification would not violate any stormwater standards or waste discharge requirements.

b) No Impact: The Proposed Modification would not deplete groundwater supplies nor would the modification substantially interfere with groundwater recharge such that the project may impede sustainable groundwater management of the underlying basin. The Proposed Modification is a component of an aquifer storage and recovery system. As a result, there would be no impact.

c) Less than Significant Impact: Implementation of the Proposed Modification would not substantially alter the existing drainage pattern in a manner that would 1) result in substantial erosion or siltation on- or off-site, 2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, and 3) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Proposed Modification would result in the introduction of a new water transmission pipeline and related improvements, including a de-chlorination facility, which could result in additional erosion during construction. These changes would not substantially increase the amount of erosion or surface runoff in a manner which would result in flooding on- or off-site due to the existing developed nature of the modification site. The Proposed Modification would not exceed the capacity of existing or planned stormwater drainage systems because all water generated by the ASR wells would remain onsite. This represents a less-than-significant effect.

d, e) No Impact: The Proposed Modification is not located within a flood hazard zone, near a dam or levee structure, or located in an area subject to significant seiche, tsunami, or mudflow risk (Monterey County, 2010b and 2010c). As a result, the Proposed Modification would not risk the release of pollutants due to inundation. In addition, the Proposed Modification would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The Proposed Modification consists of improvements to the existing ASR system and therefore represents a critical component of needed water supply infrastructure.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to hydrology and water quality.

11. Land Use and Planning

EXISTING SETTING

The Proposed Modification is located primarily within the existing paved roadway and on a previously developed site. The Proposed Modification is located in an area that is designated as Low Density Single Family Residential (RLS) in the City of Seaside General Plan (City of Seaside, 2003) and is zoned as Single Family Residential (RS-8).

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified less than significant impacts associated with land use compatibility.
- Addendum No. 1 to the ASR EIR/EA did not identify any additional significant impacts related to land use and planning resulting from implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any additional significant impacts related to land use and planning resulting from construction or operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any additional significant impacts related to land use and planning resulting from the implementation of the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any additional significant impacts related to land use and planning resulting from the implementation of the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any additional significant impacts related to land use and planning resulting from the implementation of the Water Treatment Facility Modification.

DISCUSSION

a) No Impact: Implementation of the Proposed Modification would not physically divide an established community. The Proposed Modification consists of the construction and operation of water supply infrastructure within the existing paved right-of-way of General Jim Moore Boulevard and within an area previously improved with water supply infrastructure. The installation of improvements associated with the Proposed Modification would not physically divide an established community.

b) Less than Significant Impact: The site of the Proposed Modification is in a Low-Density Single-Family Residential area according to the City of Seaside General Plan and the installation of public utility infrastructure would be a compatible use. Moreover, the Proposed Modification is consistent with existing on-site facilities in the immediate vicinity of General Jim Moore Boulevard. As a result, the Proposed Modification would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project and City of Seaside policies and ordinances would be adhered to. Construction activities would be temporary in nature and would not result in any additional impacts beyond those previously identified in connection with the ASR project.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to land use and planning.

12. Mineral Resources

EXISTING SETTING

The modification site is not located in an area containing mineral resources; therefore, a discussion of the existing setting is not included.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- No potential impacts to mineral resources were identified in the ASR EIR/EA.
- No potential impacts to mineral resources were identified in Addendum No. 1 to the ASR EIR/EA resulting from the implementation of ASR Phase 2.
- No potential impacts to mineral resources were identified in Addendum No. 2 to the ASR EIR/EA resulting from construction or operation of the Hilby Pump Station.
- No potential impacts to mineral resources were identified in Addendum No. 3 to the ASR EIR/EA resulting from the implementation of the Monterey Pipeline Re-Alignment.
- No potential impacts to mineral resources were identified in Addendum No. 4 to the ASR EIR/EA resulting from the implementation of the Backflush Basin Expansion.
- No potential impacts to mineral resources were identified in Addendum No. 5 to the ASR EIR/EA resulting from the implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b) No Impact: The modification site is not located in an area of potential mineral resources; the Proposed Modification would not impact mineral resources.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to mineral resources.

13. Noise

EXISTING SETTING

The modification site is primarily located within the existing General Jim Moore Boulevard right-of-way and within a previously developed area consisting of existing water supply infrastructure. The Proposed Modification is primarily surrounded by existing residential uses to the west, Seaside Middle School to the

north of the proposed de-chlorination facility modification, and open space uses to the east and south. The primary sources of noise in the vicinity consists of vehicular traffic along General Jim Moore Boulevard. The nearest residences to the modification site are located approximately 200 feet from the proposed Bypass Pipeline Modification along General Jim Moore Boulevard. In addition, residential uses are located approximately 75 feet from the proposed de-chlorination facility modification.

CHECKLIST

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airport an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified significant noise impacts due to exposure of sensitive receptors to elevated noise and vibration levels during construction activities and increased noise levels during operational phases. The following mitigation measures were identified to reduce impacts to a less than significant level:
 - *Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Well Drilling Activities*
 - *Mitigation Measure NZ-1b: Employ Noise-Reducing Construction practices to Meet Nighttime Standards*
 - *Mitigation Measure NZ-1c: Prepare a Noise Control Plan*
 - *Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking System*
 - *Mitigation Measure NZ-2 – Design Pump Stations to Meet Local Noise Standards*
- Addendum No. 1 to the ASR EIR/EA identified a potentially significant impact resulting from implementation of ASR Phase 2 due to the exposure of noise-sensitive land used to construction noise in excess of applicable standards. This impact would be reduced to less than significant with the implementation of the following mitigation measures:
 - *Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Well Drilling Activities*
 - *Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards*
 - *Mitigation Measure NZ-1c: Prepare a Noise Control Plan*
 - *Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking System*

- Addendum No. 2 to the ASR EIR/EA identified potentially significant impacts to nearby residences to noise levels in excess of standards and a temporary increase in ambient noise levels during construction of the Hilby Pump Station. These impacts could be reduced to less than significant levels with the implementation of the following mitigation measures:
 - *Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Well Drilling Activities*
 - *Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards*
 - *Mitigation Measure NZ-1c: Prepare a Noise Control Plan*
- Addendum No. 3 to the ASR EIR/EA also identified potentially significant impacts to nearby residences to noise levels in excess of standards and a temporary increase in ambient noise levels during construction of the Monterey Pipeline Re-Alignment. These impacts could be reduced to less than significant levels with the implementation of Mitigation Measures NZ-1a, NZ-1b, and NZ-1c.
- Addendum No. 4 to the ASR EIR/EA identified that the Backflush Basin Expansion would not result in any potentially significant noise related impacts warranting the implementation of mitigation measures.
- Addendum No. 5 to the ASR EIR/EA identified that the Water Treatment Facility Modification would not result in any potentially significant noise related impacts warranting the implementation of mitigation measures.

DISCUSSION

a, b) Less Than Significant Impact with Mitigation Incorporated: Construction of the Proposed Modification would generate temporary increases in noise associated with the use of construction equipment. In addition, construction would also result in temporary increases in groundborne vibration or groundborne noise levels in connection with construction-related activities. Temporary construction related noise and groundborne vibration could result in the exposure of nearby sensitive receptors to increased noise levels during construction. As noted above, the nearest sensitive receptor is approximately 200 feet from the proposed pipeline alignment and approximately 75 feet from the proposed de-chlorination facility located at the Paralta well site (no noise sensitive land uses are located adjacent to the Santa Margarita well-site). Potential construction-related effects would, however, be temporary in nature and would be minimized through the adherence to standard construction noise reduction measures to minimize potential impacts to adjacent noise sensitive uses. The implementation of standard construction best management practices would ensure that the proposed improvements would not result in any additional environmental effects or increase the severity of a previously identified significant impact beyond those previously identified as part of the ASR EIR/EA.

The Proposed Modification is not anticipated to result in any operational noise-related impacts associated with the operation of the proposed de-chlorination facility. This modification is adjacent to an existing sensitive receptor (i.e., residence), which is located approximately 75 feet from the proposed de-chlorination facility located at the Paralta well site. However, improvements associated with the proposed de-chlorination facility modification would be located within an enclosed structure and would substantially increase noise beyond existing levels associated with the operation of existing water distribution system infrastructure at the Paralta well site. Moreover, these types of facilities are routinely sited in noise sensitive areas and are designed to include noise reducing measures. The final design of the de-chlorination facility will include measures to minimize operational noise consistent with the City of Seaside Noise Control Ordinance. Moreover, as noted previously, the location of the proposed de-

chlorination facility is improved with existing water distribution system infrastructure (i.e., Paralta well site) and the construction of additional water supply infrastructure within an enclosed structure is not anticipated to substantially increase noise above existing levels. Additionally, the primary sources of noise in the vicinity of the Paralta well site consist predominately of noise associated with vehicular traffic on General Jim Moore Boulevard. Moreover, the proposed de-chlorination facility is not anticipated to increase noise levels beyond existing levels. The proposed de-chlorination facility would be located within an enclosed structure. The proposed de-chlorination modification would not substantially increase operational noise such that additional mitigation would be warranted.

In order to ensure that potential impacts are minimized to a less-than-significant level consistent with the analysis contained in the ASR EIR,EA, the following mitigation measures would be implemented: *Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards*, *Mitigation Measure NZ-1c: Prepare a Noise Control Plan*, and *Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking System*. These mitigation measures would ensure that impacts related to noise are reduced to a less than significant level.

c) No Impact: The Proposed Modification is not located within two miles of a municipal airport or private airstrip and would not add new sensitive receptors to the site that would be exposed to existing or future nearby noise sources.

MITIGATION MEASURES

Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards

- The construction contractor will employ noise-reducing construction practices such that nighttime standards (Table 10-3) are not exceeded. Measures that will be used to limit noise include, but are not limited to:
 - using noise-reducing enclosures around noise-generating equipment;
 - constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission; and
 - enclosing equipment.

Mitigation Measure NZ-1c: Prepare a Noise Control Plan

- The construction contractor will prepare a detailed noise control plan based on the construction methods proposed. This plan will identify specific measurement that will be taken to ensure compliance with the noise limits specified above. The noise control plan will be reviewed and approved by City staff before any noise-generating construction activity begins.

Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program.

- The construction contractor will notify residences within 500 feet of the construction areas of the construction schedule in writing prior to construction. The construction contractor will designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number

for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to noise.

14. Population and Housing

EXISTING SETTING

The Proposed Modification is in the City of Seaside. The 2010 U.S. Census population of the City of Seaside was 33,025 persons, and the City’s housing stock contains 10,872 occupied residential units, resulting in an average household size of 3.04 persons per household. The estimated population as of January 2014 was 33,534 persons. Based on Association of Monterey Bay Area Governments (AMBAG) projections, population is projected to increase in Seaside by approximately 3,095 people between 2010 and 2020. Based on the 2014 AMBAG Regional Housing Needs Allocation Plan, the total number of housing units which need to be planned in Seaside between 2014 and 2023 in order to meet Seaside’s regional housing need allocation was 393 new units, including 95 very low income, 62 low income, 72 moderate income, and 164 above moderate-income households.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- No potential impacts to population and housing were identified in the ASR EIR/EA
- No potential impacts to population and housing were identified in Addendum No. 1 to the ASR EIR/EA resulting from implementation of ASR Phase 2.
- No potential impacts to population and housing were identified in Addendum No. 2 to the ASR EIR/EA resulting from the construction and operation of the Hilby Pump Station.
- No potential impacts to population and housing were identified in Addendum No. 3 to the ASR EIR/EA resulting from implementation of the Monterey Pipeline Re-Alignment.
- No potential impacts to population and housing were identified in Addendum No. 4 to the ASR EIR/EA resulting from implementation of the Backflush Basin Expansion.
- No potential impacts to population and housing were identified in Addendum No. 5 to the ASR EIR/EA resulting from implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b) No Impact. The Proposed Modification would not induce substantial unplanned population growth or displace existing housing or people. The Proposed Modification is a necessary component of the ASR system that has been evaluated in previous environmental documents. Water generated by the ASR system serves to replace diversions from the Carmel River.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to population and housing.

15. Public Services**EXISTING SETTING**

The Proposed Modification would not impact public services; therefore, a discussion of the existing setting is not included.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- No potential impacts to public services were identified in the ASR EIR/EA.
- No potential impacts to public services were identified in Addendum No. 1 to the ASR EIR/EA resulting from implementation of Phase 2.
- No potential impacts to public services were identified in Addendum No. 2 to the ASR EIR/EA resulting from construction or operation of the Hilby Pump Station.
- No potential impacts to public services were identified in Addendum No. 3 to the ASR EIR/EA resulting from implementation of the Monterey Pipeline Re-Alignment.
- No potential impacts to public services were identified in Addendum No. 4 to the ASR EIR/EA resulting from implementation of the Backflush Basin Expansion.
- No potential impacts to public services were identified in Addendum No. 5 to the ASR EIR/EA resulting from implementation of the Water Treatment Facility Modification.

DISCUSSION

a) No Impact: Implementation of the Proposed Modification would not result in new significant impacts resulting from new or altered governmental facilities, due to the fact that it is a component of a water infrastructure project, and therefore would not increase the use of schools and parks or increase the need for fire and police protection.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to public services.

16. Recreation

EXISTING SETTING

The Proposed Modification would not impact recreational resources; therefore, a discussion of the existing setting is not included.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- No potential impacts to recreation facilities were identified in the ASR EIR/EA.
- No potential impacts to recreational facilities were identified in Addendum No. 1 to the ASR EIR/EA resulting from implementation of Phase 2.
- No potential impacts to recreational facilities were identified in Addendum No. 2 to the ASR EIR/EA resulting from construction or operation of the Hilby Pump Station.
- No potential impacts to recreational facilities were identified in Addendum No. 3 to the ASR EIR/EA resulting from implementation of the Monterey Pipeline Re-Alignment.
- No potential impacts to recreational facilities were identified in Addendum No. 4 to the ASR EIR/EA resulting from implementation of the Backflush Basin Expansion.
- No potential impacts to recreational facilities were identified in Addendum No. 5 to the ASR EIR/EA resulting from implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b) No Impact: The Proposed Modification would not result in new significant impacts because there would be no direct or indirect increased use of parks or recreational facilities as part of the modification. No additional recreational facilities are included in the Proposed Modification.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to recreation resources.

17. Transportation and Traffic

EXISTING SETTING

The Proposed Modification is primarily located on General Jim Moore Boulevard, between Coe Avenue and Hilby Avenue in the Seaside, California. In addition, the proposed de-chlorination facility modification is located at the Paralta well site, which is improved with existing water supply infrastructure. Similarly, the proposed de-chlorination facility modification at the Santa Margarita well site is also improved with existing water supply infrastructure. The surrounding area consists of open space and residential uses with normally light to medium traffic patterns, depending on the time of day. General Jim Moore Boulevard is a major street that is utilized by commuters in the Cities of Seaside, Del Rey Oaks, and Monterey. The closest highways that would potentially be used for materials transport and by construction workers in transit to the Proposed Modification are Highway 1, Highway 218, and Highway 68.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA found the ASR Project would have the following less than significant impacts to traffic and circulation:
 - temporary construction-related traffic increases,
 - construction phase conflicts with bus service lines and temporary pathway/bikeway closures,
 - increased traffic and level of service degradation from operational phases,

- an increased demand for parking.

No mitigation measures were required.

- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts related to traffic and transportation related to implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any significant impacts related to traffic and transportation resulting from construction or operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA identified potentially significant impacts related to conflicts with plans and congestion management programs. In addition, the re-alignment of the Monterey Pipeline could potentially result in inadequate emergency access during construction. These impacts could be reduced to less than significant levels with the implementation of *Mitigation Measure TR-2: Traffic Control and Safety Assurance Plan* from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.
- Addendum No. 4 to the ASR EIR/EA did not identify any significant impacts related to traffic and transportation related to implementation of the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any significant impacts related to traffic and transportation related to the construction of the Water Treatment Facility Modification.

DISCUSSION

a, d) Less than Significant: The Proposed Modification involves the installation of a Bypass Pipeline within the northbound lane of General Jim Moore Boulevard. As a result, the Proposed Modification would result in temporary lane closures during construction. Temporary lane closures could adversely affect the existing circulation system and affect existing emergency access. These impacts would, however, be less-than-significant – the Proposed Modification would include traffic control measures to ensure that potential temporary impacts during construction would not adversely affect existing traffic operations. This represents a less-than-significant impact.

b) Less than Significant Impact: The Proposed Modification would result in temporary increases in traffic during construction. According to CalAm, peak on-site construction personnel will be approximately eight (8) to ten (10) personnel. As a result, peak construction traffic could result in an additional 20 vehicle trips per day (10 AM trips and 10 PM trips). Additionally, construction would generate an average of one (1) to two (2) trips per day to the soil deposition site and an average of two (2) to three (3) deliveries per week for material deliveries. This would not be considered a substantial increase in peak hour trips due to the low volumes and the short duration of the construction period.

Operation for the Proposed Modification would not generate a substantial increase in operational traffic. As noted previously, the location of the proposed de-chlorination facility modification is improved with existing water supply infrastructure, which is regularly maintained as part of existing operations. It is anticipated that routine facility maintenance would occur by existing staff consistent with existing facility operations. It is estimated that two (2) truck deliveries would occur each month to supply the proposed de-chlorination facility modification. This represents a relatively insignificant amount of traffic in comparison to existing traffic volumes. As a result, the Proposed Modification is not anticipated to result in a significant increase in operational traffic. This is considered a less than significant impact.

c) No Impact: The Proposed Modification would not increase hazards based on a geometric design feature. The Proposed Modification consists of the installation of water supply infrastructure within the existing General Jim Moore Boulevard right-of-way and at the existing Paralta well site. The Proposed Modification would not affect existing roadway operations based on a geometric design feature. As noted above, the Proposed Modification would implement temporary traffic control measures during

construction and the Proposed Modification would restore any damage to paved areas to their pre-construction conditions following construction activities.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to transportation and traffic.

18. Tribal Cultural Resources

EXISTING SETTING

No tribal cultural resources are known to occur on the project site. The modification site is currently improved with existing paved areas and water supply infrastructure improvements. Due to the disturbed nature of the modification site, tribal cultural resources are not anticipated to be present. See discussion above under **Section 5, Cultural Resources**.

CHECKLIST

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native America tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA did not specifically evaluate tribal cultural resources as a separate CEQA topic because at the time the ASR EIR/EA was prepared the CEQA Guidelines had not been updated to require a separate evaluation of these resources. The ASR EIR/EA did, however, evaluate potential impacts to cultural resources, including potential Native American resources, in connection with the implementation of the ASR project, as more thoroughly described above.
- Similarly, Addenda No. 1 through No. 4 did not specifically consider tribal cultural resources because at the time the Addenda were prepared, the CEQA Guidelines had not been updated to require a separate evaluation of tribal cultural resources. Nevertheless, those addenda considered potential impacts to cultural resources, including Native American resources, and did not identify any additional environmental effects beyond those identified in the ASR EIR/EA.
- Addendum No. 5 to the ASR EIR/EA did not identify any significant impacts related to tribal cultural resources related to the construction of the Water Treatment Facility Modification. See summary above under **Section 5, Cultural Resources**.

DISCUSSION

a, b) Less than Significant Impact: The Proposed Modification would not result in a substantial adverse change in the significance of a tribal resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. No resources listed or eligible for listing in the California Register of Historical Resources are known to exist on-site. Moreover, the modification is also not anticipated to adversely affect any tribal resources. As noted previously in **Section 5, Cultural Resources**, mitigation measures have been identified to ensure that potential impacts to a previously unknown resource would be reduced to a less-than-significant level. The implementation of these measures would further ensure that any potential construct-related impacts to any previously unknown tribal resource would be minimized to a less-than-significant level.

CONCLUSION

The ASR EIR/EA previously evaluated potential impacts to cultural resources, including Native American resources, as part of the cultural resources section of the ASR EIR/EA. As a result, the Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to tribal resources.

19. Utilities and Service Systems

EXISTING SETTING

The Monterey Regional Waste Management District manages the Monterey Peninsula’s (including the site of the Proposed Modification) solid waste collection, disposal, and recycling system. It also receives most of Monterey County’s sewage sludge. The Waste Management District operates the Monterey Peninsula Landfill and a transfer station. Any solid waste generated during construction or operation would be disposed of at the landfill or diverted for recycling or reuse at the materials recovery facility.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project: e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA identified a potentially significant impact related to the temporary disruption of existing underground utilities during construction. This impact could be reduced to a less than significant level with the implementation of *Mitigation Measure PS-2: Coordinate Relocation and Interruptions of Service with Utility Providers during Construction* and *PS-3: Project All Existing Utilities Slated to Remain*.
- Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts to utilities and service systems resulting from ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any significant impacts to utilities and service systems resulting from the construction and operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA identified a potentially significant impact resulting from solid waste disposal and compliance with regulations related to solid waste during construction of the Monterey Pipeline Re-alignment. These impacts could be reduced to a less than significant level with the implementation of *Mitigation Measure PS-3: Construction Waste Reduction and Recycling Plan* from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.
- Addendum No. 4 to the ASR EIR/EA did not identify any significant impacts to utilities and service systems resulting from the implementation of the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any significant impacts to utilities and service systems resulting from the implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b, c) No Impact: The Proposed Modification consists of modifications to the existing ASR Project to improve system reliability and function and represents necessary improvements to the existing water supply infrastructure. The Proposed Modification is not anticipated to 1) require or result in the construction of new or expanded water or wastewater treatment facilities or other related infrastructure, the construction of which could cause significant environmental effects, 2) have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, or 3) result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments. As noted above, the Proposed Modification is a component of the ASR project and is intended to improve water supply reliability for the region. Accordingly, the Proposed Modification would not result in any additional adverse environmental impacts or increase the severity of a previously identified significant impact.

d, e) Less than Significant Impact: Construction of the Proposed Modification would generate construction debris. Construction is not, however, anticipated to generate a substantial amount of construction debris such that the modification would cause the Monterey Peninsula Landfill to exceed its permitted capacity. Moreover, all construction debris would be disposed of in accordance with all applicable regulatory requirements related to construction waste diversion and general practices to reduce the amount of construction waste. Moreover, as noted previously, excess soil would be disposed

of at an existing soil deposition site located on the west side of General Jim Moore Boulevard along Mescal Street between Plumas Avenue and Kimball Avenue, consistent with the requirements of FORA. As a result, the Proposed Modification would result in a less than significant impact in terms of solid waste generation consistent with the analysis in the ASR EIR/EA and its Addenda.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to utilities and service systems.

20. Wildfire

EXISTING SETTING

The modification site is not located in or near a state responsibility areas or lands classified as very high fire hazard severity zones.

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA did not contain an analysis of potential wildfire hazards, because at the time the ASR EIR/EA was prepared, the CEQA Guidelines had not been updated to require an evaluation of wildfire hazards. Although an analysis of potential wildfire impacts was not completed as part of the ASR EIR/EA, the ASR EIR/EA did evaluate potential impacts to existing fire protection services in connection with the implementation of the ASR project. The EIR/EA determined that the ASR project would not increase demand for fire protection services due to the nature of the project.
- Similarly, Addenda No. 1 through No. 4 did not specifically consider wildfire hazards because at the time the Addenda were prepared, the CEQA Guidelines had not been updated to require a separate evaluation of wildfire hazards. Nevertheless, those addenda considered potential impacts to fire protection services and did not identify any additional environmental effects beyond those identified in the ASR EIR/EA.

- Addendum No. 5 to the ASR EIR/EA did not identify any significant impacts to potential wildfire hazards resulting from the implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b, c, d) No Impact: The Proposed Modification consists of the construction and operation of water supply infrastructure as a component of the ASR Project. The Proposed Modification is a necessary component of existing water supply infrastructure. There are no adopted emergency response plans or emergency evacuation plans that are applicable to the modification site. As a result, the Proposed Modification is not anticipated to substantially impair an adopted emergency response plan or emergency evacuation plan. Moreover, the Proposed Modification is located within previously developed areas (i.e., roadways, Paralta well site, and Santa Margarita well site) and the construction of water supply infrastructure would not exacerbate wildlife risks on-site – nor would the Proposed Modification expose site occupants to additional wildlife related hazards. The Proposed Modification does not entail the construction of any uses that would result in the permanent occupation of the site. In addition, the site, as an existing site developed with associated water supply infrastructure does not warrant the installation of additional infrastructure that could exacerbate fire risks. Finally, the Proposed Modification would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage sites. The modification site is generally flat and consists of a previously disturbed site that is developed with water supply infrastructure and paved roadways. No potential wildfire hazards would be associated with the Proposed Modification.

CONCLUSION

The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA related to wildfire hazards.

21. Mandatory Findings of Significance

CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

- The ASR EIR/EA found that there would be less than significant cumulative impacts in all issue areas with the exception of NO_x and PM₁₀ emissions, noise and vibration generated during construction. Both of these cumulative significant impacts would be reduced to less than significant with the implementation of *Mitigation Measure Cume-1: Coordinate with Relevant Local Agencies to Develop and Implement a Phased Construction Plan to Reduce Cumulative Traffic, Air Quality, and Noise Impacts.*
- Addendum No. 1 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to implementation of ASR Phase 2.
- Addendum No. 2 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to construction and operation of the Hilby Pump Station.
- Addendum No. 3 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to implementation of the Monterey Pipeline Re-Alignment.
- Addendum No. 4 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to implementation of the Backflush Basin Expansion.
- Addendum No. 5 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to the implementation of the Water Treatment Facility Modification.

DISCUSSION

a, b, c) Less than Significant Impact: The Proposed Modification would not substantially degrade or reduce wildlife species or habitat or impact historic resources, as identified in this analysis. Potential cumulative impacts associated with the Proposed Modification would primarily occur in connection with temporary construction-related effects. As described above, a cumulative analysis for the ASR Project was performed in the ASR EIR/EA and its previous Addenda. Construction and operation of the Proposed Modification would not result in adverse impacts on human beings, either directly or indirectly; potential impacts would be temporary in nature and mitigated through the implementation of mitigation measures (to the extent they are applicable) previously identified in the ASR EIR/EA. The Proposed Modification would not result in any new significant impacts or cause an increase in severity of any significant impacts beyond those identified in the ASR EIR/EA and its Addenda.

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IV. REPORT PREPARATION AND REFERENCES

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Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

ATTACHMENT 2

AIR QUALITY AND GHG CALCULATION SPREADSHEETS

Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

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**Bypass Pipeline Addendum
Monterey County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	246.50	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Valentine Engineers, the dechlorination facility will be 17ftx14.5ft within the Peralta well site.

Demolition -

Landscape Equipment -

Operational Off-Road Equipment - Dechlorination facility will feature water pump stations.

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

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Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	1,000.00	246.50
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2021	9-30-2021	0.2836	0.2836
		Highest	0.2836	0.2836

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.9393	0.9393	3.0000e-005	1.0000e-005	0.9437
Mobile	2.1300e-003	9.5100e-003	0.0254	7.0000e-005	5.7600e-003	7.0000e-005	5.8300e-003	1.5500e-003	7.0000e-005	1.6100e-003	0.0000	6.7365	6.7365	3.4000e-004	0.0000	6.7449
Offroad	0.0915	0.7719	0.9703	1.7100e-003		0.0405	0.0405		0.0405	0.0405	0.0000	146.9539	146.9539	7.5000e-003	0.0000	147.1414
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.3640	0.4374	7.5500e-003	1.8000e-004	0.6802
Total	0.0948	0.7817	0.9960	1.7800e-003	5.7600e-003	0.0406	0.0463	1.5500e-003	0.0406	0.0421	0.3251	154.9938	155.3189	0.0303	1.9000e-004	156.1339

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.9393	0.9393	3.0000e-005	1.0000e-005	0.9437
Mobile	2.1300e-003	9.5100e-003	0.0254	7.0000e-005	5.7600e-003	7.0000e-005	5.8300e-003	1.5500e-003	7.0000e-005	1.6100e-003	0.0000	6.7365	6.7365	3.4000e-004	0.0000	6.7449
Offroad	0.0915	0.7719	0.9703	1.7100e-003		0.0405	0.0405		0.0405	0.0405	0.0000	146.9539	146.9539	7.5000e-003	0.0000	147.1414
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.3640	0.4374	7.5500e-003	1.8000e-004	0.6802
Total	0.0948	0.7817	0.9960	1.7800e-003	5.7600e-003	0.0406	0.0463	1.5500e-003	0.0406	0.0421	0.3251	154.9938	155.3189	0.0303	1.9000e-004	156.1339

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2021	7/14/2021	5	10	
2	Site Preparation	Site Preparation	7/15/2021	7/15/2021	5	1	
3	Grading	Grading	7/16/2021	7/19/2021	5	2	
4	Building Construction	Building Construction	7/20/2021	12/6/2021	5	100	
5	Paving	Paving	12/7/2021	12/13/2021	5	5	
6	Architectural Coating	Architectural Coating	12/14/2021	12/20/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 370; Non-Residential Outdoor: 123; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.8000e-004	1.6500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3653	0.3653	1.0000e-005	0.0000	0.3656
Total	2.0000e-004	1.8000e-004	1.6500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3653	0.3653	1.0000e-005	0.0000	0.3656

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.8000e-004	1.6500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3653	0.3653	1.0000e-005	0.0000	0.3656
Total	2.0000e-004	1.8000e-004	1.6500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3653	0.3653	1.0000e-005	0.0000	0.3656

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	3.2000e-004	3.9100e-003	2.0100e-003	0.0000	2.7000e-004	1.5000e-004	4.2000e-004	3.0000e-005	1.4000e-004	1.7000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0183	0.0183	0.0000	0.0000	0.0183
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0183	0.0183	0.0000	0.0000	0.0183

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	3.2000e-004	3.9100e-003	2.0100e-003	0.0000	2.7000e-004	1.5000e-004	4.2000e-004	3.0000e-005	1.4000e-004	1.7000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0183	0.0183	0.0000	0.0000	0.0183
Total	1.0000e-005	1.0000e-005	8.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0183	0.0183	0.0000	0.0000	0.0183

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005	7.5000e-004	4.1000e-004	1.1600e-003	4.1000e-004	3.9000e-004	8.0000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0731	0.0731	0.0000	0.0000	0.0731
Total	4.0000e-005	4.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0731	0.0731	0.0000	0.0000	0.0731

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005	7.5000e-004	4.1000e-004	1.1600e-003	4.1000e-004	3.9000e-004	8.0000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0731	0.0731	0.0000	0.0000	0.0731
Total	4.0000e-005	4.0000e-005	3.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0731	0.0731	0.0000	0.0000	0.0731

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456

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3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456

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3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652

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3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.6000e-004	1.4900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3287	0.3287	1.0000e-005	0.0000	0.3291
Total	1.8000e-004	1.6000e-004	1.4900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3287	0.3287	1.0000e-005	0.0000	0.3291

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652

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3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.6000e-004	1.4900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3287	0.3287	1.0000e-005	0.0000	0.3291
Total	1.8000e-004	1.6000e-004	1.4900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3287	0.3287	1.0000e-005	0.0000	0.3291

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	2.2600e-003	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

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3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	2.2600e-003	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

Bypass Pipeline Addendum - Monterey County, Annual

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Bypass Pipeline Addendum - Monterey County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1300e-003	9.5100e-003	0.0254	7.0000e-005	5.7600e-003	7.0000e-005	5.8300e-003	1.5500e-003	7.0000e-005	1.6100e-003	0.0000	6.7365	6.7365	3.4000e-004	0.0000	6.7449
Unmitigated	2.1300e-003	9.5100e-003	0.0254	7.0000e-005	5.7600e-003	7.0000e-005	5.8300e-003	1.5500e-003	7.0000e-005	1.6100e-003	0.0000	6.7365	6.7365	3.4000e-004	0.0000	6.7449

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6.97	1.32	0.68	15,369	15,369
Total	6.97	1.32	0.68	15,369	15,369

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.543895	0.028716	0.205211	0.131753	0.021859	0.005504	0.019097	0.027308	0.004155	0.002738	0.007724	0.001236	0.000805

5.0 Energy Detail

Historical Energy Use: N

Bypass Pipeline Addendum - Monterey County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.5923	0.5923	3.0000e-005	1.0000e-005	0.5946
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.5923	0.5923	3.0000e-005	1.0000e-005	0.5946
NaturalGas Mitigated	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491
NaturalGas Unmitigated	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	6502.67	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491
Total		4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491

Bypass Pipeline Addendum - Monterey County, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	6502.67	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491
Total		4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3470	0.3470	1.0000e-005	1.0000e-005	0.3491

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2036.09	0.5923	3.0000e-005	1.0000e-005	0.5946
Total		0.5923	3.0000e-005	1.0000e-005	0.5946

Bypass Pipeline Addendum - Monterey County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2036.09	0.5923	3.0000e-005	1.0000e-005	0.5946
Total		0.5923	3.0000e-005	1.0000e-005	0.5946

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	1.1400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Bypass Pipeline Addendum - Monterey County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	1.1300e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	1.1300e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

Bypass Pipeline Addendum - Monterey County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4374	7.5500e-003	1.8000e-004	0.6802
Unmitigated	0.4374	7.5500e-003	1.8000e-004	0.6802

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.4374	7.5500e-003	1.8000e-004	0.6802
Total		0.4374	7.5500e-003	1.8000e-004	0.6802

Bypass Pipeline Addendum - Monterey County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	0.4374	7.5500e-003	1.8000e-004	0.6802
Total		0.4374	7.5500e-003	1.8000e-004	0.6802

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2517	0.0149	0.0000	0.6236
Unmitigated	0.2517	0.0149	0.0000	0.6236

Bypass Pipeline Addendum - Monterey County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		0.2517	0.0149	0.0000	0.6236

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		0.2517	0.0149	0.0000	0.6236

9.0 Operational Offroad

Bypass Pipeline Addendum - Monterey County, Annual

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Pumps	2	8.00	260	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Pumps	0.0915	0.7719	0.9703	1.7100e-003		0.0405	0.0405		0.0405	0.0405	0.0000	146.9539	146.9539	7.5000e-003	0.0000	147.1414
Total	0.0915	0.7719	0.9703	1.7100e-003		0.0405	0.0405		0.0405	0.0405	0.0000	146.9539	146.9539	7.5000e-003	0.0000	147.1414

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

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Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

ATTACHMENT 3

*ASR BYPASS PIPELINE & DE-CHLORINATION FACILITY MODIFICATION –
BOTANICAL SURVEY RESULTS*

Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

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DENISE DUFFY & ASSOCIATES, INC.

PLANNING AND ENVIRONMENTAL CONSULTING

Memorandum

To: Jonathan Lear, PG, CHg, MPWMD Water Resources Manager

From: Matt Johnson, Senior Environmental Scientist, Denise Duffy & Associates, Inc. (DD&A)

CC: Tyler Potter, Project Manager, DD&A

Date: June 25, 2020

Subject: **ASR Bypass Pipeline & De-Chlorination Facility Modification - Botanical Survey Results**

Introduction

DENISE DUFFY & ASSOCIATES, Inc. (DD&A) was contracted by Monterey Peninsula Water Management District (MPWMD) to conduct botanical surveys for the proposed Bypass Pipeline & De-Chlorination Facility Modification (Proposed Modification) to the existing Aquifer Storage and Recovery (ASR) Project. The Proposed Modifications include the bypass pipeline, de-chlorination facility, and the use of an existing soil deposition site within the City of Seaside, at the intersection of General Jim Moore Boulevard and Military Avenue as well as adjacent to Mescal Street (**Figure 1a & 1b**). The survey areas are comprised of all proposed modification components and the area immediately adjacent to the identified modification areas.

This memorandum presents the findings of botanical surveys conducted by DD&A Senior Environmental Scientist Matt Johnson, as well as Assistant Environmental Scientists Max Hofmarcher and Liz Camillo for the Proposed Modification.

Methods

The evaluation area was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service (USFWS) *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000), the California Department of Fish and Wildlife (CDFW) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society (CNPS) *Botanical Survey Guidelines* (CNPS, 2001).

All plants observed within the evaluation area during the surveys were identified to species using keys and descriptions in *The Plants of Monterey County an Illustrated Field Key* (Matthews and Mitchell, 2015) and *The Jepson Manual: Vascular Plants of California, Edition 2*. Scientific nomenclature for plant species identified within this document follows Baldwin, et. al, (2012); common names follow Matthews and Mitchell (2015).

Surveys for spring blooming special-status plant species were conducted on April 24, 2020 and April 29, 2020. Survey methods included walking through the survey area, using GPS and aerial maps to identify project boundaries and map any special-status plants observed. Special-status plant species populations were mapped as points when five or fewer plants, within three feet of each other, were encountered. For populations mapped as points the total number of individual plants was also recorded. Populations

greater than five plants were recorded as polygons, total number of plants were not recorded. All GPS data was differentially corrected and imported into ArcGIS for analysis and production of cartographic materials.

Survey Results

DD&A documented multiple special status species plants within the proposed modification areas, including Monterey Ceanothus (*Ceanothus rigidus*) (California Native Plant Society California Rare Plant Rank [CNPS CRPR] 1B and HMP), Kellogg's Horkelia (*Horkelia cuneata* var. *sericea*) (CNPS CRPR 1B), Monterey Spineflower (*Chorizanthe pungens* var. *pungens*) (CNPS CRPR 1B and Federally Threatened), and Sandmat Manzanita (*Arctostaphylos pumila*) (CNPS CRPR 1B and HMP Species). Tables 1 and Figure 2 detail the results of the botanical survey. No special status plant species were identified within or adjacent to the de-chlorination facility survey area.

Table 1.
Special-Status Plants Documented within the ASR Well Survey Area (Figure 1a)

Common Name	Scientific Name	# of Points/Individuals	Individual # of Plants	# of Polygons	FT ²
Monterey Ceanothus	<i>Ceanothus rigidus</i>	8	12	2	4,780

Table 2.
Special-Status Plants Documented within the Soil Deposition Survey Area (Figure 1b)

Common Name	Scientific Name	# of Points/Individuals	Individual # of Plants	# of Polygons	FT ²
Monterey Ceanothus	<i>Ceanothus rigidus</i>	8	9	0	N/A
Kellogg's Horkelia	<i>Horkelia cuneata</i> var. <i>sericea</i>	10	28	5	189
Monterey Spineflower	<i>Chorizanthe pungens</i> var. <i>pungens</i>	0	0	1	755
Sandmat Manzanita	<i>Arctostaphylos pumila</i>	0	0	5	6,235

Discussion

DD&A documented occurrences of the federally listed Monterey spineflower within the proposed soil deposition area. In order to avoid potential impacts to Monterey spineflower, DD&A recommends that the soil deposition area plans include avoidance measures to ensure that the use of this existing deposition area would not adversely affect this and other identified special status plant species. Based on DD&A's review of conceptual detail, it appears that avoidance of this special status plant species is feasible while still achieving the goals and objectives of the modification. DD&A understands that avoidance materials will be identified on the site plans and installed to ensure all potential impacts to special status plant species are avoided. As a result, DD&A does not anticipate that the use of the proposed soil deposition site would result in any additional environmental effects beyond those identified in the ASR EIR/EA.

Please feel free to contact me by email mjohnson@ddaplanning.com or phone (831)373-41341 x27 to discuss any questions or comments you may have.

REFERENCES

CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

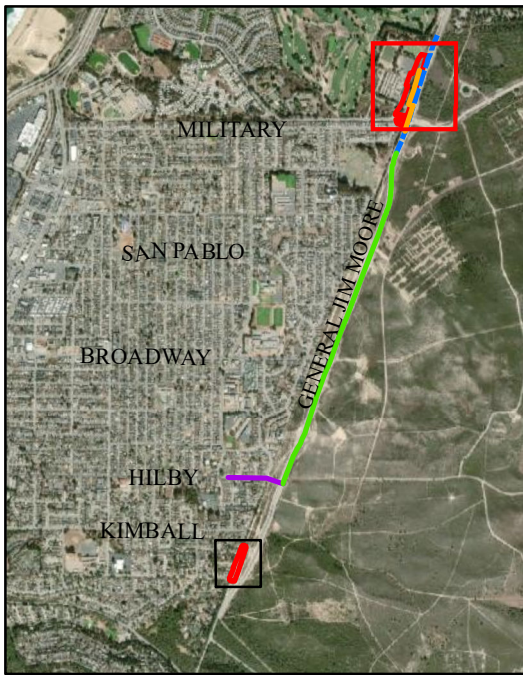
California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines.

Matthews, M.A. and M. Mitchell. 2015. The Plants of Monterey County, an Illustrated Field Key; Second Edition. California Native Plant Society Press, Sacramento, California. 446 pp.

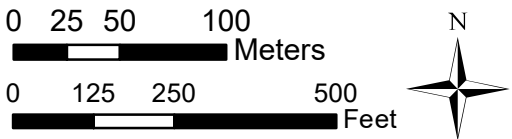
U.S. Fish and Wildlife Service (Service). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.

Attachment A.

Figures



- Monterey Ceanothus (*Ceanothus rigidus*) <5
- ASR Well
- Kellog's Horkelia (*Horkelia cuneata* var. *sericea*) <5
- Dechlorination Facility
- Monterey Ceanothus (*Ceanothus rigidus*) ≥5
- Survey Area
- Soil Deposition Area (0.87 Acres)
- Kellog's Horkelia (*Horkelia cuneata* var. *sericea*) ≥5
- Existing 36-inch Pipeline
- Existing ASR Pipeline
- Monterey Spineflower (*Chorizanthe pungens* var. *pungens*) ≥5
- Existing Pipeline
- Sandmat Manzanita (*Arctostaphylos pumila*) ≥5
- Proposed 36-inch Desalination Pipeline Extension



ASR Bypass Pipeline Addendum Special Status Plant Species Survey Results

Date: 6/25/2020
 Scale: 1 inch = 300 feet
 Project: 2020-15



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Denise Duffy and Associates, Inc.
 Environmental Consultants Resource Planners
 947 Cass Street, Suite 5
 Monterey, CA 93940
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Figure
1a



- Monterey Ceanothus (*Ceanothus rigidus*) <5
- Kellog's Horkelia (*Horkelia cuneata* var. *sericea*) <5
- Monterey Ceanothus (*Ceanothus rigidus*) ≥5
- Kellog's Horkelia (*Horkelia cuneata* var. *sericea*) ≥5
- Monterey Spineflower (*Chorizanthe pungens* var. *pungens*) ≥5
- Sandmat Manzanita (*Arctostaphylos pumila*) ≥5
- ASR Well
- Dechlorination Facility
- Survey Area
- Soil Deposition Area (0.87 Acres)
- Existing 36-inch Pipeline
- Existing ASR Pipeline
- Existing Pipeline
- Proposed 36-inch Desalination Pipeline Extension

0 12.525 50
Meters

0 70 140 280
Feet



ASR Bypass Pipeline Addendum Special Status Plant Species Survey Results

Date: 6/25/2020
Scale: 1 inch = 200 feet
Project: 2020-15



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Figure
1b

Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

ATTACHMENT 4

APPROVED MMRP FOR THE AQUIFER STORAGE AND RECOVERY PROJECT

Addendum No. 6 to the ASR EIR/EA
Bypass Pipeline and De-Chlorination Facility Modification

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Revised Mitigation Monitoring Plan

CEQA requires that when a lead agency makes findings of significant effects identified in an EIR, it must also adopt a program for reporting and monitoring mitigation measures that were adopted or made conditions of project approval. NEPA requires that the lead agency must include a monitoring and enforcement program for each mitigation measure identified in an EA or Environmental Impact Statement. The objectives of the monitoring are to:

- ensure that mitigation measures are properly implemented,
- provide feedback to agency staff and decision makers about the effectiveness of their actions,
- provide learning opportunities for improving mitigation measures on future projects, and
- identify the need for enforcement action before irreversible environmental damage occurs.

This Mitigation Monitoring Plan (MMP) is designed to ensure that the mitigation measures identified in the EIR/EA are fully implemented. The MMP contains each mitigation measure found in the EIR/EA and is organized by topic in the same order as the contents of the EIR/EA. The agency responsible for monitoring is identified for each measure. The MMP will be considered by the MPWMD in conjunction with project review.

Vegetation and Wildlife

Mitigation Measure BIO-1: Minimize or Prevent Disturbance to Adjacent NRMA

To prevent disturbance of the adjacent NRMA, management measures will be carried out during project construction and operation to minimize construction effects and the potential for introducing invasive nonnative species. The construction contractor will implement BMPs to prevent the spread outside the construction area of construction materials, oil and fuel, sidecast soil, dust, or water runoff. All invasive nonnative plants, such as iceplant or pampas grass, will be removed from the construction area prior to site disturbance to avoid the spread of plant fragments or seeds. A firebreak consistent with the requirements of the Presidio of Monterey Fire Department and acceptable to the City of

Seaside Fire Department will be located and maintained by MPWMD between the well site and the adjacent NRMA.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure BIO-2: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15)

Clearing of the site for inspection, maintenance and cleaning, and construction of the well and associated facilities and the pipeline, and subsequent inspection and maintenance and cleaning activities will result in the removal of trees and shrubs that provide suitable nesting habitat for migratory birds. To avoid the loss of active migratory bird nests, tree and shrub removal will be conducted only during the nonbreeding season for migratory birds (generally September 1 to February 15). Removing woody vegetation during the nonbreeding season will ensure that active nests will not be destroyed by removal of trees supporting or adjacent to active nests.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Aquatic Resources

Mitigation Measure AR-1: Conduct Annual Survey Below River Mile 5.5 and Monitor River Flow in January–June Period.

Even though the project impact is beneficial and no mitigation is required, the following mitigation is proposed to ensure adequate monitoring of the lower Carmel River. At the beginning of each diversion season and following each storm with a peak flow greater than 3,000 cfs, MPWMD shall conduct a survey of the river channel below RM 5.5 and identify five specific locations where low flows or the channel configuration could potentially block or impair upstream migration of adult steelhead.¹ During the period from December 1 through May 31 when water is being diverted from the Carmel River and injected into the Seaside Groundwater Basin, MPWMD shall monitor flow at the Highway One Bridge, and water currents, depths, and channel configuration at each of the five sites previously identified. If evidence of impairment or blockage is found, MPWMD shall cease diverting until flow increases or until the channel configuration is modified so as to alleviate the blockage or impairment. In the event that channel conditions improve or deteriorate for more than two seasons, the bypass flow criteria shall be reexamined and may be modified by among between NOAA Fisheries, CDFG, and the MPWMD.

¹ Potential impairment or blockage shall be monitored by measuring water depths at the shallowest points at 2-foot intervals along the crest of riffles. For the purpose of monitoring and assessing the need for channel modifications, the potential for impairment and/or blockage shall be based on the following criteria: **blockage**, if the width and depth of a continuous section is less than 5 feet wide and ≥ 0.6 feet deep; **impaired**, if the width and depth of a continuous section is five to ten feet wide and ≥ 0.6 feet deep, and **no impairment**, if the width and depth of a continuous section is ≥ 10 feet wide and ≥ 0.6 feet deep.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during project operation.

Mitigation Measure AR-2: Cooperate to Help Develop a Project to Maintain, Recover, or Increase Storage in Los Padres Reservoir and If Needed, Continue Funding Program to Rescue and Rear Isolated Juveniles

To ensure the continued benefit of the Proposed Project to the Carmel River and dependent resources during future low-flow periods, MPWMD will encourage and work with Cal-Am, CDFG, and NOAA Fisheries to investigate and develop a project to improve summer flows and the quality of releases by maintaining, recovering, or increasing storage capacity in the existing Los Padres Reservoir. MPWMD will provide staff expertise and data, as requested. Cal-Am, as owner and operator of Los Padres Dam and Reservoir, is responsible for maintenance of the dam and compliance with existing regulations, including water right conditions. MPWMD will request that Cal-Am develop an updated elevation-capacity curve for Los Padres Reservoir that provides current estimates of the amount of storage capacity available at various elevations in the reservoir area.

In the meantime, MPWMD will continue funding and operation of its program to rescue and rear juvenile steelhead that are stranded downstream of the USGS gaging station at Robles del Rio (RM 14.4). This program is part of MPWMD's mitigation program that was adopted in 1990 when the MPWMD Board certified the MPWMD Water Allocation Program EIR. Without significant progress in maintaining storage capacity in Los Padres Reservoir, the rescue program will be needed in most years.-

Monitoring: Cal-Am is responsible for ensuring that this mitigation measure is implemented. Cal-Am will conduct on-site monitoring of Los Padres Reservoir during project operation. MPWMD will provide staff expertise and data, as requested, and continue funding and operation of its program to rescue and rear juvenile steelhead.

Cultural Resources

Mitigation Measure CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction Activities

If buried cultural resources such as chipped stone or groundstone, historic debris, building foundations, or human bone are inadvertently discovered during ground-disturbing activities, the construction contractor will stop work in that area and within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Treatment measures typically include avoidance strategies or mitigation of impacts through data recovery programs such as excavation or detailed documentation.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure CR-2: Stop Work If Human Remains Are Encountered during Construction Activities

If human skeletal remains are encountered, the construction contractor will notify MPWMD and the county coroner immediately. MPWMD will ensure the construction specifications include this order.

If the county coroner determines that the remains are Native American, the coroner will be required to contact the Native American Heritage Commission (pursuant to Section 7050.5 [c] of the California Health and Safety Code) and the County Coordinator of Indian Affairs. A qualified Jones & Stokes archaeologist will also be contacted immediately.

If human remains are discovered in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- the coroner of the county has been informed and has determined that no investigation of the cause of death is required; and
- if the remains are of Native American origin:
 - the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of with appropriate dignity the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or
 - the NAHC was unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the commission.

According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Surface and Groundwater Hydrology and Water Quality

Mitigation Measure GWH-1: Comply with Performance Standards in NPDES Permits

All construction activities, vehicle storage, and discharges associated with project construction and operation, including well discharges, shall be accomplished in accordance with NPDES permits from the RWQCB to ensure no degradation of surface or groundwater quality. All performance standards contained in the permit will be met.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure GWH-2: Operate Project in Compliance with SWRCB and DHS Policies

MPWMD shall operate the Proposed Project in compliance with the SWRCB's Anti-Degradation Policy (Resolution 68-16), and applicable DHS regulations regarding drinking water quality.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during project operation.

Mitigation Measure GWH-3: Modify Project Operations as Required by Results of Monitoring

Groundwater conditions shall be tracked via the MPWMD's existing monthly monitoring program. In the event that any adverse impacts to groundwater conditions occur, MPWMD shall halt operations and consult with the RWQCB to determine appropriate operational changes.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during project operation.

Mitigation Measure GWH-4: Operate Project in Compliance With NOAA Fisheries Recommendations and to Reduce Unlawful Diversions

MPWMD shall operate the Proposed Project in accordance with all of the bypass terms recommended by NOAA Fisheries in its 2002 report, *Instream Flow Needs for Steelhead in the Carmel River, Bypass Flow Recommendations for Water Supply Projects Using Carmel River Waters*. In addition, Cal-Am shall, to the maximum extent feasible, be required to utilize water that is available from the Seaside Basin due to the Proposed Project during the low-flow season from June 1 through November 30 to help reduce unlawful diversions from the Carmel River.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during project operation.

Noise

Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Well Drilling Activities.

The project applicant shall ensure that the construction contractor prohibit the use of all ancillary and unnecessary equipment during nighttime hours. The only equipment that will be allowed to operate during nighttime activities would be the drilling and well construction equipment; cleanup and other activities will occur only during daytime activities.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards.

The construction contractor will employ noise-reducing construction practices such that nighttime standards (Table 10-3) are not exceeded. Measures that will be used to limit noise include, but are not limited to:

- using noise-reducing enclosures around noise-generating equipment;
- constructing barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission; and
- enclosing equipment.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure NZ-1c: Prepare a Noise Control Plan.

The construction contractor will prepare a detailed noise control plan based on the construction methods proposed. This plan will identify specific measurement that will be taken to ensure compliance with the noise limits specified above. The noise control plan will be reviewed and approved by City of Seaside staff before any noise-generating construction activity begins.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program.

The construction contractor will notify residences within 500 feet of the construction areas of the construction schedule in writing prior to construction.

The construction contractor will designate a noise disturbance coordinator who will be responsible for responding to complaints regarding construction noise. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Mitigation Measure NZ-2: Design Pump Stations to Meet Local Noise Standards.

MPWMD will design the new pump station and chemical/electrical building so that noise levels do not exceed applicable City of Seaside noise standards and ordinances. Prior to field acceptance, MPWMD will retain an acoustical consultant to measure noise levels from the operating facility. If project-generated noise exceeds the noise ordinance performance standards, additional noise attenuation measures will be implemented to meet the standards. The proposed facility will not receive final acceptance until the required noise standards are met. This measure will be made a condition of the final design review.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Hazards and Hazardous Materials

Mitigation Measure HAZ-1: Implement MEC Safety Precautions during Grading and Construction Activities at the Project Site.

Because of the proposed well site's location, the following safety precautions are required for on-site activities. The requirements may be modified upon completion of the Munitions Response Remedial Investigation/Feasibility Study (MR RI/FS) process for the munitions response sites.

- All personnel accessing the proposed well site will be trained in MEC recognition. This safety training is provided by the U.S. Army at no cost to the trainee. Training may be scheduled by contacting Fort Ord BRAC Office, Lyle Shurtleff at 831-242-7919.
- If an item is discovered that is or could be MEC, it shall not be disturbed. The item shall be reported immediately to the Presidio of Monterey Police Department at 831-242-7851 so that appropriate U.S. military explosive ordnance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations at the expense of the army.

- Ground disturbing activities, including perimeter fence installation, will be coordinated with USACE Unexploded Ordnance Safety Specialist so that appropriate construction-related precautions may be provided (Fisbeck pers. comm.). The USACE Pamphlet EP 75-1-2 entitled *Munitions and Explosives of Concern (MEC) Support During Hazardous, Toxic and Radioactive Waste (HTRW) and Construction Activities*, dated August 1, 2004, which can be found at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/ep75-1-2/toc.htm> shall be followed by the USACE Safety Specialist to determine the type of construction oversight that will be needed based on the type of construction activities to be performed.
- Construction activities at the project site are subject to Monterey County Code, Ordinance 5012, Subsection 1 dated 2005, Title 16 “Environment,” Chapter 16.1 “Digging and Excavating on the Former Fort Ord,” which can be found at <http://municipalcodes.lexisnexis.com/codes/montereyco>. This ordinance prohibits excavation, digging, development, or ground disturbance unless an excavation permit is obtained and the permit requirements are followed.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Public Services and Utilities

Mitigation Measure PS-1: Coordinate Relocation and Interruptions of Service with Utility Providers during Construction

The construction contractor will contact Underground Service Alert (800/642-2444) at least 48 hours before excavation work begins in order to verify the nature and location of underground utilities. In addition, the contractor will notify and coordinate with public and private utility providers at least 48 hours before the commencement of work adjacent to any utility, unless the excavation permit specifies otherwise. In addition, the service provider will be notified in advance of all service interruptions and will be given sufficient time to notify customers. The timing of interruptions will be coordinated with the providers to ensure that the frequency and duration of interruptions are minimized.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Mitigation Measure PS-2: Protect All Existing Utilities Slated to Remain

The construction contractor will be responsible for ensuring protection of all utilities slated to remain. All buried lines will be tape-coated in accordance with the requirements of American Water Works Association C214. All new water services, fire services, and water mains will be cathodically protected, in accordance with contract documents. In addition, the contractor will be required to comply with State Department of Health Services criteria for the separation of water mains and sanitary sewers, as set forth in Section 64630, Title 22, of the

California Administrative Code. MPWMD will ensure this measure is included in the contract specifications.

Monitoring: MPWMD is responsible for ensuring that this mitigation measure is implemented. MPWMD will conduct on-site monitoring during construction.

Visual Resources

Mitigation Measure VIS-1: Incorporate Light-Reduction Measures into the Plan and Design of Exterior Lighting at Well Site.

Where lighting is required or proposed, MPWMD will incorporate the following light-reduction measures into the lighting design specifications to reduce light and glare. The lighting design will also meet minimum safety and security standards.

- Luminaires will be the minimum required for property security to minimize incidental light.
- Luminaires will be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent properties and open space. Fixtures that project light upward or horizontally will not be used.
- Luminaires will be focused only where needed (such as building entrances) and should not provide a general “wash” of light on building surfaces.
- Luminaires will be directed away from habitat and open space areas adjacent to the project site.
- Luminaires will provide good color rendering and natural light qualities. Low-pressure sodium and high-pressure sodium fixtures that are not color-corrected will not be used.
- Luminaire mountings will be downcast and the height of poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent properties and open space. Light poles will be no higher than 20 feet. Luminaire mountings will have nonglare finishes.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Cumulative Impacts

Mitigation Measure Cume-1: Coordinate with Relevant Local Agencies to Develop and Implement a Phased Construction Plan to Reduce Cumulative Traffic, Air Quality, and Noise Impacts

MPWMD will contact local agencies that have projects planned in the same area (i.e., project sites within 1 mile or projects that affect the same roadways) and that have construction schedules that overlap with construction of the Proposed

Project. MPWMD (or their contractor) will coordinate with local agencies responsible for said projects to develop a phased construction plan that includes the following components.

- Evaluate roadways affected by construction activities and minimize roadway and traffic disturbance (e.g., lane closures and detours) and the number of construction vehicles using the roadways. This may involve scheduling some construction activities simultaneously or phasing.
- Prepare compatible traffic control plans for construction projects. If one traffic control plan cannot be prepared, the construction contractor for the Proposed Project and the relevant local agencies (or their construction contractors) will ensure that the traffic control plans for projects affecting the same roadways are compatible. The traffic control plan can be modeled after that required for the Proposed Project in Chapter 2.
- Phase construction activities so NO_x and PM10 emissions remain below MPUAPCD thresholds. For medium and large projects (defined as projects that involve construction on a 1-acre site or larger because there is a reasonable likelihood it could contribute to exceeding the MBUAPCD NO_x and PM10 emissions thresholds) that will be constructed during the same timeframe, MPWMD and the agencies will develop a phased construction plan so the cumulative NO_x emissions remain below 137 pounds per day and the cumulative PM10 emissions remain below 82 pounds per day (or less than 2.2 acres per day is disturbed). The phased construction plan will identify planned construction activities and equipment, anticipated emissions, and a schedule that can be used to estimate daily emissions. The phased construction plan will be reviewed and approved by the MPUAPCD. It will likely be necessary for proponents of other projects to implement NO_x-reducing construction practices, as well as dust reduction measures, to ensure NO_x and PM10 emissions are at acceptable levels. The dust reduction measures should include all feasible measures contained in Table 8-2 of MBUAPCD's CEQA Air Quality Guidelines (Getchell pers. comm.), which include the following.
 - Limit grading to 8.1 acres per day and grading and excavation to 2.2 acres per day.
 - Water graded / excavated areas at least twice daily. Frequency should be based on the type of operations, soil and wind exposure.
 - Prohibit all grading activities during periods of high wind (over 15 mph).
 - Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
 - Apply nontoxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations, and hydro-seed area.
 - Haul trucks shall maintain at least 2'0" of freeboard.
 - Cover all trucks hauling dirt, sand, or loose materials.

- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads at construction sites.

Monitoring: Prior to initiation of construction activities, MPWMD will ensure that this mitigation measure is implemented. MPWMD is responsible for ensuring compliance for the duration of the project.

Temporary Pipeline Analysis

Mitigation Measure WLD-1. Comply with U.S. Fish and Wildlife Service Biological Opinion Terms and Conditions. The U.S. Army will require that any contracts let to construct the proposed temporary pipeline include the U.S. Fish and Wildlife Service BO terms and conditions for Reasonable and Prudent Measures numbers 5, 6, and 7 (U.S. Fish and Wildlife Service 2005, pages 63–65).

Monitoring: Prior to initiation of construction activities, Cal-Am will ensure that this mitigation measure is implemented. Cal-Am is responsible for ensuring compliance for the duration of the project.

Mitigation Measure WLD-2: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15)

The placement and removal of the temporary pipeline may result in the trimming of trees and shrubs that provide suitable nesting habitat for migratory birds. To avoid the loss of active migratory bird nests, tree and shrub removal, if necessary, will be conducted only during the nonbreeding season for migratory birds (generally September 1 to February 15). Removing woody vegetation during the nonbreeding season will ensure that active nests will not be destroyed by removal of trees supporting or adjacent to active nests.

If shrub and tree trimming cannot be accomplished before the breeding season, a qualified wildlife biologist will conduct focused nest surveys for active nests of migratory bird species. If active nests are found in the project area, and if construction activities must occur during the nesting period, an appropriate “no-disturbance” buffer around the nest sites will be implemented until the young have fledged (as determined by a qualified biologist).

Monitoring: Prior to initiation of construction activities, Cal-Am will ensure that this mitigation measure is implemented. Cal-Am is responsible for ensuring compliance for the duration of the project.

Mitigation Measure CUL-1: Stop Work if Buried Cultural Deposits Are Encountered during Construction Activities

If buried cultural resources such as chipped or ground stone, quantities of bone or shell material, or historic debris or building foundations are inadvertently discovered during ground-disturbing activities, work will be stopped within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find. If, after evaluation by a qualified archaeologist, an archaeological site or other find is identified as meeting the criteria for inclusion in the NRHP or the CRHR, Cal-Am will retain a qualified archaeologist to develop and implement an adequate program for investigation, avoidance if feasible, and data recovery for the site, with Native American consultation, if appropriate.

If human skeletal remains are inadvertently encountered during construction of the temporary pipeline, the contractor will contact the Monterey County Coroner immediately. If the county coroner determines that the remains are Native American, the coroner will contact the NAHC, as required by Section 7050.5[c] of the California Health and Safety Code, and the County Coordinator of Indian Affairs. A qualified archaeologist will also be contacted immediately.

Monitoring: Cal-Am is responsible for ensuring that this mitigation measure is implemented. Cal-Am will conduct on-site monitoring during construction.

Mitigation Measure HAZ-1: Provide MEC Training to Construction Workers.

All construction workers that will enter the project site will receive training from qualified personnel on the identification and avoidance of MEC prior to beginning work.

Monitoring: Cal-Am is responsible for ensuring that this mitigation measure is implemented. Cal-Am will conduct on-site monitoring during construction.