ADMINISTRATIVE DRAFT ADDENDUM NO. 5

TO THE

AQUIFER STORAGE AND RECOVERY PROJECT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

FOR THE

WATER TREATMENT FACILITY MODIFICATION

July 8, 2019

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 Water Treatment Facility Modification to Support Addendum No. 5 to the ASR EIR/EA
- 2. Air Quality and GHG Calculations Spreadsheets dated June 6, 2019
- 3. Approved MMRP for the Aquifer Storage and Recovery Project

Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

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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; and,
- 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.

MPWMD has prepared this Addendum to the ASR EIR/EA to address the effects of constructing and operating the proposed water treatment facility, which would constitute a change to the ASR Project. This Addendum evaluates the proposed water treatment facility modification at the ASR Phase 1 site, also known as the Santa Margarita site, to provide additional treatment capacity 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 water treatment 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 Water Treatment Facility Modification**, which concludes 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 water treatment facility.
- The proposed water treatment facility would not result in a substantial increase in the severity of the impacts identified in the ASR EIR/EA and Addenda.

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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 water treatment facility.

II. **PROJECT LOCATION**

The proposed project is located in the City of Seaside, southeast of the intersection of General Jim Moore Boulevard and Eucalyptus Road, in an area known as the Santa Margarita Site. The project site is improved with various infrastructure improvements, including an existing backflush basin, electrical building, and other support infrastructure. **Figure 1. Location Map** shows the location of the facility within the City of Seaside.

III. PROJECT DESCRIPTION

The proposed modification consists of the construction of a new water treatment building and abovegrade treatment works, as well as related water treatment piping (**Figure 2, Site Plan**), commonly referred to as "water treatment facility" in this document. In addition, the project also entails the construction of a truck off-loading rack adjacent to the proposed water treatment facility. The building would be approximately 1,700 square feet. The maximum building height of the treatment facility would be approximately 19 feet above finish grade. The building would be designed to be visually compatible with existing structures located on-site. The proposed water treatment facility would increase treatment capacity to accommodate production from existing facilities, as well as other future facilities. The proposed treatment facility would increase the overall treatment capacity to approximately 12.9 million gallons per day (MGD) or 9,000 gallons per minute (gpm).

Typical earth moving equipment will be used during construction of works including clearing and trenching. All deleterious material and soil must remain onsite due to unexploded ordnance concerns associated with the former use of the project site as part of the former Fort Ord military base.

Construction is anticipated to begin in 2019 and may last approximately seven to nine months. Construction is planned to occur Monday through Friday from 7am to 7pm. It is estimated that an average of two (2) 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; however, these deliveries would be minimal (estimated to be about 20 deliveries for the duration of construction). Construction workers will access the site from the existing driveway and will park at or near 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.

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

This Addendum has been prepared pursuant to CEQA Guidelines Section 15164, which states: "A lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in 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.

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- 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 water treatment facility 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 water treatment facility 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 the following can be accessed at address: https://www.mpwmd.net/wp-content/uploads/2015/08/FEIR 8-21-06.pdf. Addendum No. 1 to that document be found online the following address: can at 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.

2. Environmental Effects

As detailed in **Attachment 1**, **Initial Study Checklist for the Water Treatment Facility 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

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addition, the proposed project 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

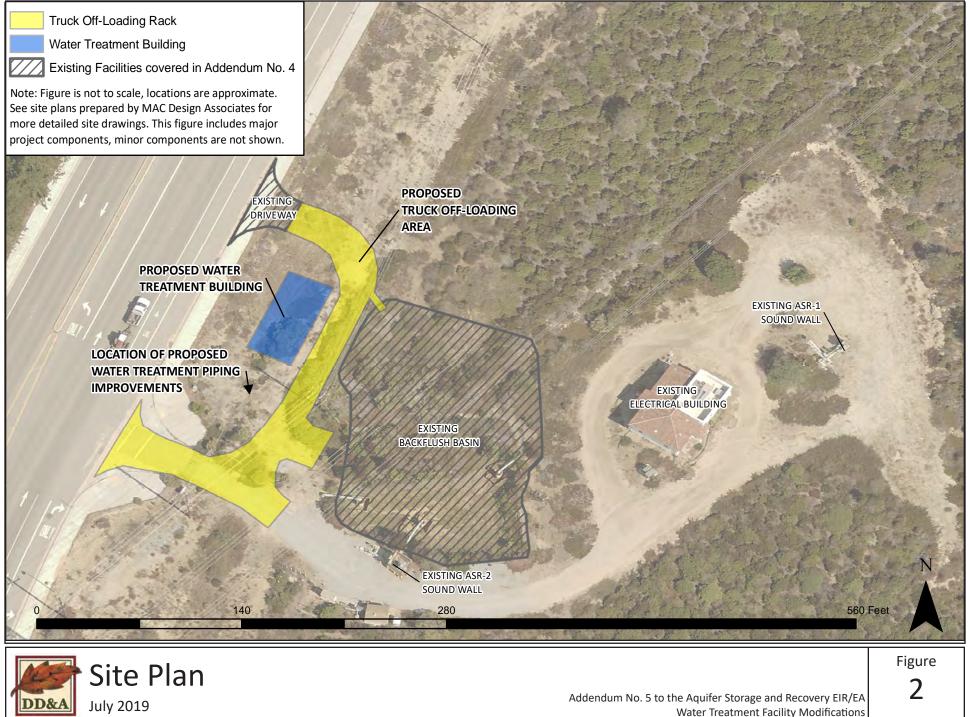
Section 15164 of the CEQA Guidelines states that a lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. Based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

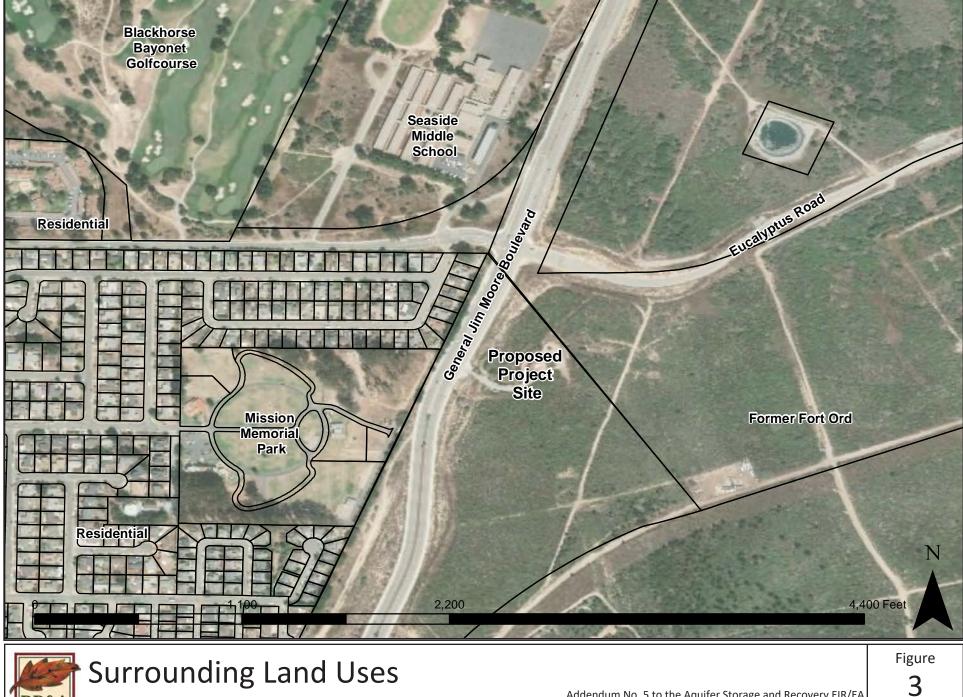
- No new significant environmental effects or a substantial increase in the severity of previously identified significant effects would occur as a result of the construction and operation of the water treatment facility;
- No substantial changes have occurred or would occur with respect to the circumstances 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
- 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.



July 2019

Addendum No. 5 to the Aquifer Storage and Recovery EIR/EA Water Treatment Facility Modifications





July 2019

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ATTACHMENT 1

INITIAL STUDY CHECKLIST FOR THE WATER TREATMENT FACILITY MODIFICATION TO SUPPORT ADDENDUM NO. 5 TO THE ASR EIR/EA

Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

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Denise Duffy and Associates

Initial Study Checklist Water Treatment Facility Modification

I. PROJECT DATA

Project Title: Water Treatment 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: Maureen Hamilton, (831) 658-5622

Project Proponents: Monterey Peninsula Water Management District (MPWMD)

Project Location: The project modification would be located at the existing Santa Margarita ASR Site, which is southeast of the intersection of General Jim Moore Boulevard and Eucalyptus Road in the City of Seaside.

City of Seaside General Plan Designation: Low Density Single Family Residential¹

Zoning: Single Family Residential (RS-8)

Project Description: The proposed modification consists of the construction of a new water treatment building (commonly referred to as "water treatment facility" in this document) and above-grade treatment works, as well as related water treatment piping. In addition, the project also entails the construction of a truck off-loading rack adjacent to the proposed water treatment facility. The building would be approximately 1,700 square feet. The maximum building height of the treatment facility would be approximately 19 feet above finish grade. The building would be designed to be visually compatible with existing structures located on-site. The proposed water treatment facility would increase treatment capacity to accommodate production from existing facilities located at the Seaside Middle School site, as well as other future ASR facilities. The proposed treatment facility would increase the overall treatment capacity to approximately 12.9 MGD or 9,000 gpm.

Surrounding Land Uses:

- North: Eucalyptus Road followed by open space
- South: Open space
- East: Open space
- West: General Jim Moore Boulevard followed by residential and a cemetery

¹ This parcel is currently designated as Low Density Single Family Residential in the 2003 Seaside General Plan, however, it is designated as "Future Specific Plan'" in *Figure 6. General Plan Designations* in the Draft Seaside 2040 General Plan.

Initial Study Checklist Water Treatment Facility Modification

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 project may significantly impact without mitigation. Sources used for analysis of environmental effects are listed in **Section IV. References.**

⊠Aesthetics	□ Agricultural Resources	□ Air Quality
Biological Resources	⊠Cultural Resources	□Energy
□Geology and Soils	Greenhouse Gas Emissions	oxtimesHazards and Hazardous Materials
□Hydrology and Water Quality	□Land Use and Planning	Mineral Resources
□Noise	\Box Population and Housing	Public Services
	□Transportation and Traffic	□Tribal Cultural Resources
\Box Utilities and Service Systems	□Wildfire	\Box Mandatory Findings of Significance

III. EVALUATION OF ENVIRONMENTAL IMPACTS

1. Aesthetics

EXISTING SETTING

The existing site is located in a disturbed area, south east of the intersection of General Jim Moore Boulevard and Eucalyptus Road in the City of Seaside. The Proposed Project site is not visible from Highway 1 or located near a designated scenic vista. The Proposed Project site is located on the Former Fort Ord. The site is improved with water infrastructure. The surrounding area is primarily open space. 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 there are existing water infrastructure facilities located on-site.

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?			\boxtimes	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
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?				

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
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		\boxtimes		

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 aesthetics impacts related to the Backflush Basin Expansion project.

DISCUSSION

a, b) Less Than Significant Impact. The project site is not located within a scenic highway corridor. Moreover, the project site is not considered to be a scenic vista. The site is improved with water supply infrastructure and related improvements. As a result, the construction of additional water supply related infrastructure 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 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 visual character of the proposed site, as the existing site is currently disturbed and contains water infrastructure facilities. The proposed modifications would result in the construction of a new water treatment facility and related improvements. The water treatment facility would be designed to be visually compatible with the surrounding environment and would be designed to be compatible with existing on-site structures (i.e., existing electrical building). Moreover, the final design of the proposed water treatment facility would be conducted in consultation with the City of Seaside. This impact is considered to be less than significant.

d) Less than Significant Impact with Mitigation. The proposed project would result in the construction and operation of additional water supply infrastructure on a previously developed site. As noted above, the site is currently improved with existing water supply infrastructure that is part of the ASR project. The

Initial Study Checklist Water Treatment Facility Modification

construction and operation of the proposed water treatment facility would result in the introduction of additional lighting and glare on the project site. The ASR EIR/EA previously evaluated potential impacts related to increase in lighting and glare. In order to lessen the potential impacts associated with site lighting, the ASR EIR/EA identified mitigation to ensure that impacts would be reduced to a less than significant level. The implementation of that mitigation would ensure that potential impacts associated with the proposed modification would remain less than significant. As a result, the proposed modification would not result in any additional adverse environmental effects beyond those previously evaluated in the ASR EIR/EA. Impacts associated with the proposed modification would be less than significant with the implementation of mitigation.

MITIGATION MEASURES

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.

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. Because the modification could potentially contribute additional sources of lighting and glare associated with the construction and operation of the proposed water treatment facility, *Mitigation Measures VIS-1: Incorporate Light-Reduction Measures into the Plan and Design of Exterior Lighting at Well Site* from the previously approved ASR EIR/EA must be implemented.

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2. Agricultural Resources

EXISTING SETTING

The proposed project 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?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
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))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				
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?				

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.

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• Addendum No. 4 to the ASR EIR/EA did not identify any potentially significant impacts to agricultural resources related to the Backflush Basin Expansion.

DISCUSSION

a-e) No Impact. The proposed water treatment facility site and its surrounding area do 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 located 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 proposed project 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.

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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?			\boxtimes	
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?				
c) Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?				

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 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 Plan²* from the Pure Water Monterey Mitigation Monitoring and Reporting Plan.
- Addendum No. 3 to the ASR EIR/EA did not identify any 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.

DISCUSSION

Emissions would be generated during construction of the water treatment facility and related improvements 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 water treatment facility.

² 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 proposed 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.

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a) Less than Significant Impact: CEQA Guidelines Section15125(b) requires that a project is 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 in the AQMP. The proposed project 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 affects. 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);
 - o 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)
 - \circ 82 pounds per day of PM₁₀
 - 55 pounds per day of PM_{2.5}
 - o 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 with 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 PM_{10} 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. Construction projects below these acreage thresholds would be below the

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applicable MBARD 82 lb/day threshold of significance and would constitute a less than significant effect for the purposes of CEQA (MBARD, 2016). The construction area of the proposed modification is anticipated to disturb approximately 1.9 acres, as a result, construction of the proposed modification would be below the threshold of 2.2 acres of daily grading. As a result, the Proposed Project 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.

	Emissions in Pounds/Day			
	NO _x PM _{2.5} PM ₁₀ ROG			
Significance Threshold (MBARD)	137*	55	82	137*
Emissions generated by the Project	6.1	0.27	0.82	0.74
Exceed Threshold?	No	No	No	No
Emissions Source: Attachment 2. Air Quality and GHG Calculations Spreadsheets				

Table 1. Construction Air Quality Emissions

urce: Attachment 2. Air Q uality and GHG Calculations Spreadsheet

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 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 seven (7) to nine (9) 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 guality emissions associated with the operation of the water treatment facility and related infrastructure. Table 2. Operational Air Quality Emissions identifies anticipated operational air quality emissions for the proposed modification. The increase in operational emissions associated with the proposed expansion 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.

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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	0.59	0.05	0.05	2.2	
Exceed Threshold?	No	No	No	No	
Emissions Source: Attachment 2, Air Quality and GHG Calculations	Spreadsheet	s			

Table 2. Operational Air Quality Emissions

Emissions Source: Attachment 2, Air Quality and GHG Calcula 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 proposed modification would be located on Fort Ord Reuse Authority (FORA) owned property, which is currently occupied with similar facilities. The nearest sensitive receptors to the site are approximately 190 feet to the west of the project driveway. The proposed water treatment facility 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 modification 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.

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4. Biological Resources

EXISTING SETTING

The proposed site is located on the Former Fort Ord on a site referred to as the Santa Margarita Site. Vegetation clearing, grading and excavation activities were previously completed on the site in connection with the Backflush Basin Expansion project. Some minor earthwork would be necessary to accommodate construction of the proposed modification, although the extent of these activities would be generally limited given the footprint of the proposed modification. Moreover, all potential ground disturbing activities associated with the proposed modification would occur in previously disturbed areas and no vegetation removal is proposed in connection with this modification. While the extent of ground disturbing activities would generally be performed on previously disturbed area, construction activities could still result in potential biological impacts.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				
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?				
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?				
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?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
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?				

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

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> 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.

DISCUSSION

a) Less than Significant Impact: Construction of the proposed project would not result in any vegetation removal. As noted above, the site was previously cleared in connection with the implementation of the Backflush Basin Expansion. As a result, no additional vegetation removal is warranted in connection with the proposed project. Some minor grading is, however, anticipated in connection with construction-related activities.

Construction of the proposed project has the potential to result in direct mortality or disturbance of California horned lizard. Although this species is known to occur on the former Fort Ord in small numbers (U.S. Army Corps of Engineers, 1992), it is common throughout the southern portion of the Central Coast Range and occurs in fair numbers throughout the rest of its range in California (Jennings and Hayes, 1994). Because the status of the California horned lizard in the region is relatively abundant, and given the

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previously disturbed nature of the site and the species is unlikely to occur in significant numbers in this small area, this impact is considered less than significant.

The project could also result in potential impacts to avian species due to construction-related activities, although potential impacts would be minimal given that the site was previously cleared in connection with the Backflush Basin Expansion. As a result, potential impacts to avian species would generally be limited. For instance, the proposed project could result in potential impacts during construction if construction activities occur in close proximity 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.

In order 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 preconstruction 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 project site was previously graded in connection with the Backflush Basin Expansion. No vegetation removal is proposed as part of this project. 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 Proposed Project site therefore there are no impacts to this sensitive habitat as a result of the construction of the proposed project.

d) No Impact: With the possible exception of nesting birds and raptors addressed in a) above, the project 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 project would not conflict with local policies protecting biological resources. No tree removal would be associated with the Proposed Project. The Project 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.

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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 located 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?				\boxtimes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

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*

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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 identified 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 identified 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 Project site or in the vicinity.

b) Less than Significant Impact with Mitigation: Ground disturbing activities could potentially unearth unknown archaeological resources. However, the project site has previously been surveyed for nearby and adjacent projects, and there is a low possibility of archaeological resources to be present. Moreover, the site was also previously graded in connection with the Backflush Basin Expansion project. While previously unknown or buried archaeological resources are not anticipated to be encountered during project 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 and provided below.

c) Less than Significant Impact with Mitigation: Implementation of the proposed modification would not be expected to disturb human remains based upon lack of previously identified human remains on the site and 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, included in **Attachment 3**. The Proposed Project 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.

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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, *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 must be implemented.

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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

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

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.

DISCUSSION

a, b) Less than Significant Impact: The proposed water treatment facility 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 project 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 project consists of a modification to the ASR Project and is a critical component of water supply infrastructure serving the region. Accordingly, the project does not entail the wasteful or inefficient use of energy. Moreover, given the nature of the project it is also not anticipated to conflict with any goals related to renewable energy production or energy efficiency. The final design of

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the proposed water treatment 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 existing 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 and included the area, the findings of those prior analyses are considered relevant and applicable for the purposes of this Addendum. Those prior analyses described the proposed site as consisting of older coastal dunes, which are described as weakly consolidated, poorly grading fine to medium grained sand deposits (Pueblo Water Resources, 2009).

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			\boxtimes	
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.				
ii) Strong seismic ground shaking?			\boxtimes	
iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
iv) Landslides?			\boxtimes	
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
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?				
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?				

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Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes

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 impact related to geology and soils resulting from the construction or operation of the Hilby Pump Station.
- Addendum No. 3 did not identify any significant impact related to geology and soils resulting from the Monterey Pipeline Re-Alignment.
- Addendum No. 4 did not identify any significant impact related to geology and soils resulting from the Backflush Basin Expansion.

DISCUSSION

a, b, c) Less than Significant Impact: The proposed site is located in a seismically active region and therefore it is reasonable to expect that the proposed water treatment facility would be exposed to significant seismic shaking during the design lifetime of the facility. Since the nearest known active or potentially active fault is mapped approximately 3.6 miles from the site, the potential for ground surface fault rupture is low. Based on review done by Pacific Crest Engineers of regional liquefaction maps, the site is located in an area classified as having a low potential for liquefaction. In addition, groundwater was not encountered within the upper 36 feet of the site. The potential for liquefaction and lateral spreading is also considered low. There is also a low probability for seismically induced landsliding because the site is relatively flat. As a result, this is considered a less than significant impact. Moreover, the final design of the proposed water treatment facility 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 lack of previously identified paleontological resources on the site or in the vicinity, there are no known paleontological resources that would be disturbed by implementation of the Proposed 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 geology and soils.

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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 (CO_2e), 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.

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

CHECKLIST

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.

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- 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.

DISCUSSION

a) Less Than Significant Impact: The MBARD has determined that if a project emits less than 10,000 metric tons per year (MT/yr) CO_2e 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 water treatment facility and related improvements would result in a onetime emission total of up to 131.71 MT/yr of CO₂e during the seven to nine-month construction period; therefore, the annual amortized GHG emissions for the construction phase is 26.52 MT/year. The estimated annual greenhouse gas emissions generated by operation of the proposed project would be approximately 316.62 MT/year. Therefore, the estimated annual emissions for the entire project 448.32 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

A search of the California Department of Toxic Substances Control, EnviroStor database shows that the site is located on the former Fort Ord, which is an active superfund site pursuant to Government Code Section 65962.5. The Proposed Project site occupies land that was historically used for military training. Because of the former military use at the project site, 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. The probability of encountering MEC at the Proposed Project site is considered low (Arcadis, Inc./Weston Solutions, Inc., 2018). No other contaminated cleanup sites are located within the vicinity of the Proposed Project Site (California Department of Toxic Substances Control, 2016). Seaside Middle School is located approximately 0.2 miles from the Proposed Project Site.

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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?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions 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?			\boxtimes	
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?				
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?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
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?				

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.

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> 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.

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 water treatment facility would 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. 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 project site is located within an area that formerly contained live-firing ranges for various weapons, 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.*

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 it involves no construction or operational activities that would fully block transportation pathways.

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g) Less than Significant Impact: The project site is primarily surrounded by undeveloped lands. While there is potential for wildland fires in such a land use type, the Proposed Project would not increase the risk of wildfires to residents because construction of the Project would not involve any equipment or activities that present a severe fire risk. Implementation of the Proposed Project 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 Project'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 Presidion 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 modification could potentially contribute to previously identified significant impacts to 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 must be implemented.

10. Hydrology and Water Quality

EXISTING SETTING

The proposed site is sloped with an elevation of approximately 331 feet above sea level at the northwest side of the site, and an elevation of approximately 360 feet above sea level on the northeast side of the site. The majority of the project site is pervious surface. Storm runoff from the site currently is directed into the existing backflush basin. The site does not contain any natural drainages or waterways.

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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?				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
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:				
i) result in substantial erosions or siltation on- or off-site;			\boxtimes	
 ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 			\boxtimes	
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				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				\boxtimes

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.

DISCUSSION

a) Less Than Significant Impact: The proposed project 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 Stormwater Pollution Prevention Plan or SWPPP). MPWMD and their contractors will comply will all applicable water quality standards and waste discharge

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requirements. As a result, the proposed modification would not violate any stormwater standards or waste discharge requirements.

b) No Impact: The proposed project would not deplete groundwater supplies nor would the project substantially interfere with groundwater recharge such that the project may impede sustainable groundwater management of the underly basin. The project 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 onor 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 project would result in the introduction new structures and related improvements, which could result in additional erosion through the introduction of impervious surfaces, but 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. The project would not exceed the capacity of existing or planned stormwater drainage systems desceed the capacity of existing or planned stormwater and related improvements, which could not substantially increase the amount of erosion or surface runoff in a manner which would result in flooding on- or off-site. The project 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 site 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 project would not risk the release of pollutants due to project inundation. In addition, the project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The project consists of a modification 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 project site is located on Monterey County Assessor Parcel Number (APN) 031-211-001-000 and is owned by FORA. The site is also designated as parcel E34 by the U.S. Army Corps of Engineers. It 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) in the City of Seaside Zoning District Map (City of Seaside, 2010).

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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?				\boxtimes
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?				

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.

DISCUSSION

a) No Impact: Implementation of the proposed modification would not physically divide an established community. The existing facilities and proposed facilities will be contained within a single parcel along an existing roadway.

b) Less than Significant Impact: The proposed project site is designated by the City of Seaside General Plan as Low Density Single Family Residential and the installation of public utility infrastructure would be a compatible use. Moreover, the proposed infrastructure improvements are consistent with existing onsite facilities (i.e., the water treatment facility and related improvements are consistent with existing onsite uses). 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 proposed project site is not located in an area containing mineral resources, therefore a discussion of the existing setting is not included.

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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?				
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?				

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.

DISCUSSION

a, b) No Impact: The proposed project site is not located in an area of potential mineral resources; the proposed water treatment facility and related improvements 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 Proposed Project site is located within an existing water infrastructure site, which is located adjacent to open space and a residential neighborhood. There are currently motors associated with the existing ASR wells currently in operation at the Santa Margarita site, which generate a minimal amount of noise. The nearest residences to the project site are located approximately 190 feet from the existing driveway.

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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?				
b) Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
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?				

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 Nosie 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:

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- 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 proposed Backflush Basin Expansion would not result in any potentially significant noise related impacts warranting the implementation of mitigation measures.

DISCUSSION

a, b) Less Than Significant Impact: Project construction would generate temporary increases in noise associated with the use of construction equipment. In addition, project 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 190 feet from the site entrance. 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 modification 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 and Addendum 4.

c) No Impact: The proposed project 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.

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 project is located 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

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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)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

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.

DISCUSSION

a, b) No Impact. The proposed project would not induce substantial unplanned population growth or displace existing housing or people. The project 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 project 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 project would not impact public services; therefore, a discussion of the existing setting is not included.

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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:				
Fire protection?				\boxtimes
Police protection?				\boxtimes
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes

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.

DISCUSSION

a) No Impact: Implementation of the proposed project 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.

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16. Recreation

EXISTING SETTING

The proposed project 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?				
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?				

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 Monterey Pipeline Re-Alignment.

DISCUSSION

a, b) No Impact: The proposed project 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 Proposed Project. No additional recreational facilities are included in the proposed Backflush Basin Expansion.

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.

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17. Transportation and Traffic

EXISTING SETTING

The proposed project site is located off General Jim Moore Boulevard, near the intersection of Eucalyptus Road and General Jim Moore Boulevard in the City of Seaside. The surrounding area is open space and residential 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 commenters 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 project site are Highway 1, Highway 218, and Highway 68.

CHECKLIST

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

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:
 - o temporary construction-related traffic increases,
 - construction phase conflicts with bus service lines and temporary pathway/bikeway closures,
 - o increased traffic and level of service degradation from operational phases,
 - o 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.

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• 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.

DISCUSSION

a, b) Less than Significant Impact: The proposed project would result in minimal temporary increases in traffic during construction. Construction worker traffic will result from the estimated average of two (2) workers onsite during the day which could result in up to four vehicle trips per day from workers (two AM trips and two PM trips). MPWMD estimates that peak on-site construction personnel will be approximately eight (8) to 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). 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 proposed water treatment facility and related improvements would not generate a substantial increase in operational traffic. As noted previously, the project site is improved with existing MPWMD facilities at the Santa Margarita site that require routine maintenance. It is anticipated that the proposed water treatment facility would be operated by existing staff. 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, d) No Impact: The proposed project would not increase hazards based on a geometric design feature or result in emergency access concerns. The project site is also accessible via a second driveway on General Jim Moore Boulevard that provides additional point of access to the Santa Margarita site for emergency vehicles. During construction, access to the proposed project will be provided by an existing driveway off General Jim Moore Boulevard and construction workers will park onsite; therefore, there would be no significant parking or access impacts.

CONCLUSION

The proposed project 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 project site is currently improved with a variety of water supply infrastructure. The project was previously cleared of vegetation as part of the Backflush Basin Expansion Project and no tribal cultural resources were uncovered during those actions. Due to the disturbed nature of the project site, tribal cultural resources are not anticipated to be present. See discussion above under **Section 5, Cultural Resources**.

Initial Study Checklist Water Treatment Facility Modification

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 			\boxtimes	
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.				

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.
- See summary above under **Section 4, Cultural Resources.**

DISCUSSION

a, b) Less than Significant Impact: The proposed project 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 project is also not anticipated to adversely affect any tribal resources. As noted previously in **Section 4, 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 project 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 proposed project site) 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 by Proposed Project construction or operation would be disposed of at the landfill or diverted for recycling or reuse at the materials recovery facility.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
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?				
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?				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			\boxtimes	

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

Initial Study Checklist Water Treatment Facility Modification

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.

DISCUSSION

a, **b**, **c**) **No Impact:** The proposed project consists of the construction and operation of a water treatment facility and related infrastructure as a component of the ASR Project. The proposed project is a necessary component of 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 is a component of the ASR project and is intended to improve water supply reliability for the region. Accordingly, the proposed project 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 project would generate construction debris. Project construction is not, however, anticipated to generate a substantial amount of construction debris such that the proposed project 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. As a result, the proposed project 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 project 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 project site is not located in or near a state responsibility areas or lands classified as very high fire hazard severity zones.

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CHECKLIST

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				
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?				
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?				
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?				

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.

DISCUSSION

a, **b**, **c**, **d**) **No Impact**: The proposed project consists of the construction and operation of a water treatment facility and related infrastructure as a component of the ASR Project. The proposed project 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 project site. As a result, the proposed modification is not anticipated to substantially impair an adopted emergency response plan or emergency evacuation plan. Moreover, the project is located on a previously developed site and the construction of additional water supply infrastructure on the site would not exacerbate wildlife risks on-site – nor would the project expose project occupants to additional wildlife related hazards. The project 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 project would not expose people or structures to significant risks, including downslope or downstream

Initial Study Checklist Water Treatment Facility Modification

flooding or landslides, as a result of runoff, post-fire slope instability, or drainage sites. The project site is generally flat and consists of a previously disturbed site that is developed with water supply infrastructure. No potential wildfire hazards would be associated with the project.

CONCLUSION

The proposed project 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.

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?				
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)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

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.

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• Addendum No. 4 to the ASR EIR/EA did not identify any cumulatively considerable impacts related to implementation of the Backflush Basin Expansion.

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 water treatment facility 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.

IV. REPORT PREPARATION AND REFERENCES

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Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

ATTACHMENT 2

AIR QUALITY AND GHG CALCULATION SPREADSHEETS

Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

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Denise Duffy and Associates

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	82.70	1000sqft	1.90	82,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Col	mpany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Consistent with the assumptions in Addendum #4, this analysis assumes that size of the site is 1.9 acres. The improvements covered in Addendum #5 would not increase the size of the size; all permanent and temporary impacts would occur within the existing footprint of the site. Similar to the analysis completed for Addendum #4, this acreage represents a worst-case scenario. The actual area of disturbance is expected to be much less.

Construction Phase - This analysis assumes that construction will begin on January, 2020 and will last 9 months. This duration of construction represents a worse-case scenario. It is anticipated that the duration of construction will be less.

Off-road Equipment - Defaults Used Off-road Equipment - Defaults Used Off-road Equipment - Defaults Used Off-road Equipment - Defaults Used

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Grading - Consistent with the Analysis in Addendum #4, the total acres graded (1.9) represents a worse-case scenario. This is the total area of the Santa Margarita Site. The actual area of disturbance will be much less.

Demolition - NA

Trips and VMT - This analysis assumes that 2 workers (resulting in 4 total trips per day) will be required for construction for most of the time and that a maximum of 10 people (resulting in 20 total trips per day) would be onsite for part of the time. Because there is no net import/export, no hauling trips would result during the grading phase. Two vendor (large trucks) deliveries (resulting in 4 total trips) are assumed per day for each of the phases of construction.

On-road Fugitive Dust - The average assumed speed of vehicles onsite during construction is 15 MPH.

Architectural Coating - NA Vehicle Trips - There will be no new additional employees onsite compared to existing conditions. Currently the site is checked by District staff approximately once per day, this will remain the same after the proposed project is complete.

Vehicle Emission Factors - Defaults Used Vehicle Emission Factors - Defaults Used Vehicle Emission Factors - Defaults Used Road Dust - Defaults Used Woodstoves - NA Consumer Products - Defaults Used Area Coating - NA Landscape Equipment - The proposed project does not include any ongoing landscaping. Energy Use - Defaults Used Water And Wastewater - Operation of the project will not require the use of water for indoor use or for outdoor use. Solid Waste - Operation of the project will not generate any solid waste. Land Use Change - No addition areas will be cleared, removal of vegetation was covered in previous phases of the project (Addendum #4). Sequestration - The proposed project does not include the planting of trees. Construction Off-road Equipment Mitigation - No Mitigation

Mobile Land Use Mitigation - No Mitigation

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Mobile Commute Mitigation - No Mitigation Area Mitigation - No Mitigation

Energy Mitigation - No Mitigation

Water Mitigation - No Mitigation

Waste Mitigation - No Mitigation

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	96.00
tblConstructionPhase	NumDays	4.00	26.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	11.00
tblConstructionPhase	PhaseEndDate	11/11/2020	7/3/2020
tblConstructionPhase	PhaseEndDate	2/5/2020	2/20/2020
tblConstructionPhase	PhaseEndDate	11/25/2020	7/31/2020
tblConstructionPhase	PhaseEndDate	1/30/2020	1/15/2020
tblConstructionPhase	PhaseStartDate	2/6/2020	2/21/2020
tblConstructionPhase	PhaseStartDate	1/31/2020	1/16/2020
tblConstructionPhase	PhaseStartDate	11/12/2020	7/4/2020
tblConstructionPhase	PhaseStartDate	1/29/2020	1/1/2020
tblGrading	AcresOfGrading	9.75	1.90
tblGrading	AcresOfGrading	5.50	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblOnRoadDust	MeanVehicleSpeed	40.00	15.00
tblSolidWaste	SolidWasteGenerationRate	102.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

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tblWater	IndoorWaterUseRate	19,124,375.00	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	35.00	4.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	14.00	2.00

2.0 Emissions Summary

Greenhouse Gas Emissions Summary

The MBARD has 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.

- One-time estimated construction GHG Emissions = 131.705 MT
- Estimated Construction GHG Emissions, amortized over 30 years = 26.518 MT/yr
- Annual estimated operational GHG emissions = 316.615 MT/yr
- Total annual GHG emissions = 448.320 MT/yr

448.320 MT/yr is under the threshold of 10,000 MT/yr, therefor this is a less than significant impact.

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2.1 Overall Construction

Unmitigated Construction

	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
Year					ton	s/yr							МТ	/yr		
2020	0.1351	1.1123	0.8703	1.5500e- 003	0.0934	0.0565	0.1499	0.0496	0.0537	0.1033	0.0000	131.0015	131.0015	0.0282	0.0000	131.7052
Maximum Pounds per day	0.1351 0.740	1.1123 6.095	0.8703 <mark>4.769</mark>	1.5500e- 003 <mark>0.008</mark>	0.0934 0.512	0.0565 0.310	0.1499 0.821	0.0496 0.272	0.0537 0.294	0.1033 0.566	0.0000 0.000	131.0015 791.234	131.0015 791.234	0.0282 0.170	0.0000 0.000	131.7052 795.514

Mitigated Construction

	ROG	NOx	СО	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
Year					ton	s/yr							МТ	/yr		
2020	0.1351	1.1123	0.8703	1.5500e- 003	0.0934	0.0565	0.1499	0.0496	0.0537	0.1033	0.0000	131.0013	131.0013	0.0282	0.0000	131.7050
Maximum	0.1351	1.1123	0.8703	1.5500e- 003	0.0934	0.0565	0.1499	0.0496	0.0537	0.1033	0.0000	131.0013	131.0013	0.0282	0.0000	131.7050

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	0.5682	0.5682
2	4-1-2020	6-30-2020	0.5559	0.5559
3	7-1-2020	9-30-2020	0.1154	0.1154
		Highest	0.5682	0.5682

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					ton	is/yr							MT	/yr		
Area	0.3806	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003
Energy	0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	315.1421	315.1421	0.0112	3.9900e- 003	316.6126
Mobile	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
Waste	n				 	0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	N					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3923	0.1070	0.0909	6.4000e- 004	0.0000	8.1300e- 003	8.1300e- 003	0.0000	8.1300e- 003	8.1300e- 003	0.0000	315.1441	315.1441	0.0112	3.9900e- 003	316.6147
Pounds per day	2.150	0.586	0.498	0.004	0.000	0.045	0.045	0.000	0.045	0.045	0.000	1903.488	1903.488	0.068	0.024	1912.370

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SC		gitive M10	Exhaust PM10	PM10 Total	Fugit PM2		aust 12.5	PM2.5 Total	Bio- CC	2 NBio	o- CO2	Total CO2	CH4	N20	CC	O2e
Category						tons	s/yr									М	T/yr			
Alca	0.3806	1.0000e 005	1.0600 003		000		0.0000	0.0000		0.0	000	0.0000	0.0000		500e-)03	2.0500e- 003	1.0000e 005	- 0.000		900e- 103
Energy	0.0118	0.1069	0.089	8 6.40 00			8.1300e- 003	8.1300e- 003			00e- 03	8.1300e- 003	0.0000	315	5.1421	315.1421	0.0112	3.9900 003	e- 316.	.6126
Mobile	0.0000	0.0000	0.000	0 0.0	000 0.	0000	0.0000	0.0000	0.00	00 0.0	000	0.0000	0.0000	0.	0000	0.0000	0.0000	0.000	0.0	0000
Waste	F,						0.0000	0.0000		0.0	000	0.0000	0.0000	0.	0000	0.0000	0.0000	0.000	0.0	0000
Water	F,						0.0000	0.0000		0.0	000	0.0000	0.0000	0.	0000	0.0000	0.0000	0.000	0.0	0000
Total	0.3923	0.1070	0.090	9 6.40 00		0000	8.1300e- 003	8.1300e- 003	0.00		00e- 03	8.1300e- 003	0.0000	315	i.1441	315.1441	0.0112	3.9900 003	e- 316.	.6147
	ROG		NOx	со	SO2	Fugi PM			VI10 otal	Fugitive PM2.5		aust PM2 12.5 Tot		o- CO2	NBio-	CO2 Tota	I CO2	CH4	N20	CO2e
Percent Reduction	0.00		0.00	0.00	0.00	0.0	00 0	.00 0	.00	0.00	0.	.00 0.0	00	0.00	0.0	0 0.	00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

CalEEMod Version: CalEEMod.2016.3.2

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2020	1/15/2020	5	11	
2	Grading	Grading	1/16/2020	2/20/2020	5	26	
3	Building Construction	Building Construction	2/21/2020	7/3/2020	5	96	
4	Paving	Paving	7/4/2020	7/31/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.9

Acres of Paving: 0

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

OffRoad Equipment

CalEEMod Version: CalEEMod.2016.3.2

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

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
Site Preparation	3	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	4.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Site Preparation - 2020

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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0290	0.0000	0.0290	0.0159	0.0000	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	8.9600e- 003	0.1009	0.0424	9.0000e- 005		4.5200e- 003	4.5200e- 003		4.1500e- 003	4.1500e- 003	0.0000	8.3196	8.3196	2.6900e- 003	0.0000	8.3869
Total	8.9600e- 003	0.1009	0.0424	9.0000e- 005	0.0290	4.5200e- 003	0.0335	0.0159	4.1500e- 003	0.0201	0.0000	8.3196	8.3196	2.6900e- 003	0.0000	8.3869

Unmitigated Construction Off-Site

	ROG	NOx	со	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					ton	s/yr							МТ	/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	5.0000e- 005	1.3700e- 003	3.7000e- 004	0.0000	7.0000e- 005	1.0000e- 005	8.0000e- 005	2.0000e- 005	1.0000e- 005	3.0000e- 005	0.0000	0.2982	0.2982	1.0000e- 005	0.0000	0.2985
Worker	1.0000e- 004	9.0000e- 005	8.0000e- 004	0.0000	1.7000e- 004	0.0000	1.8000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1663	0.1663	1.0000e- 005	0.0000	0.1665
Total	1.5000e- 004	1.4600e- 003	1.1700e- 003	0.0000	2.4000e- 004	1.0000e- 005	2.6000e- 004	7.0000e- 005	1.0000e- 005	8.0000e- 005	0.0000	0.4645	0.4645	2.0000e- 005	0.0000	0.4650

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3.2 Site Preparation - 2020

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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0290	0.0000	0.0290	0.0159	0.0000	0.0159	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9600e- 003	0.1009	0.0424	9.0000e- 005		4.5200e- 003	4.5200e- 003		4.1500e- 003	4.1500e- 003	0.0000	8.3196	8.3196	2.6900e- 003	0.0000	8.3868
Total	8.9600e- 003	0.1009	0.0424	9.0000e- 005	0.0290	4.5200e- 003	0.0335	0.0159	4.1500e- 003	0.0201	0.0000	8.3196	8.3196	2.6900e- 003	0.0000	8.3868

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					ton	s/yr							МТ	/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	5.0000e- 005	1.3700e- 003	3.7000e- 004	0.0000	7.0000e- 005	1.0000e- 005	8.0000e- 005	2.0000e- 005	1.0000e- 005	3.0000e- 005	0.0000	0.2982	0.2982	1.0000e- 005	0.0000	0.2985
Worker	1.0000e- 004	9.0000e- 005	8.0000e- 004	0.0000	1.7000e- 004	0.0000	1.8000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1663	0.1663	1.0000e- 005	0.0000	0.1665
Total	1.5000e- 004	1.4600e- 003	1.1700e- 003	0.0000	2.4000e- 004	1.0000e- 005	2.6000e- 004	7.0000e- 005	1.0000e- 005	8.0000e- 005	0.0000	0.4645	0.4645	2.0000e- 005	0.0000	0.4650

Date: 6/6/2019 1:49 PM

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3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0597	0.0000	0.0597	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0176	0.1961	0.0839	1.8000e- 004		8.9000e- 003	8.9000e- 003		8.1900e- 003	8.1900e- 003	0.0000	16.1065	16.1065	5.2100e- 003	0.0000	16.2367
Total	0.0176	0.1961	0.0839	1.8000e- 004	0.0597	8.9000e- 003	0.0686	0.0324	8.1900e- 003	0.0406	0.0000	16.1065	16.1065	5.2100e- 003	0.0000	16.2367

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					ton	s/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	1.2000e- 004	3.2300e- 003	8.8000e- 004	1.0000e- 005	1.7000e- 004	2.0000e- 005	1.9000e- 004	5.0000e- 005	2.0000e- 005	7.0000e- 005	0.0000	0.7048	0.7048	3.0000e- 005	0.0000	0.7056
Worker	2.3000e- 004	2.1000e- 004	1.8900e- 003	0.0000	4.1000e- 004	0.0000	4.2000e- 004	1.1000e- 004	0.0000	1.1000e- 004	0.0000	0.3930	0.3930	2.0000e- 005	0.0000	0.3935
Total	3.5000e- 004	3.4400e- 003	2.7700e- 003	1.0000e- 005	5.8000e- 004	2.0000e- 005	6.1000e- 004	1.6000e- 004	2.0000e- 005	1.8000e- 004	0.0000	1.0978	1.0978	5.0000e- 005	0.0000	1.0990

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3.3 Grading - 2020

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					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.0597	0.0000	0.0597	0.0324	0.0000	0.0324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0176	0.1961	0.0839	1.8000e- 004		8.9000e- 003	8.9000e- 003		8.1900e- 003	8.1900e- 003	0.0000	16.1065	16.1065	5.2100e- 003	0.0000	16.2367
Total	0.0176	0.1961	0.0839	1.8000e- 004	0.0597	8.9000e- 003	0.0686	0.0324	8.1900e- 003	0.0406	0.0000	16.1065	16.1065	5.2100e- 003	0.0000	16.2367

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					ton	s/yr							МТ	/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	1.2000e- 004	3.2300e- 003	8.8000e- 004	1.0000e- 005	1.7000e- 004	2.0000e- 005	1.9000e- 004	5.0000e- 005	2.0000e- 005	7.0000e- 005	0.0000	0.7048	0.7048	3.0000e- 005	0.0000	0.7056
Worker	2.3000e- 004	2.1000e- 004	1.8900e- 003	0.0000	4.1000e- 004	0.0000	4.2000e- 004	1.1000e- 004	0.0000	1.1000e- 004	0.0000	0.3930	0.3930	2.0000e- 005	0.0000	0.3935
Total	3.5000e- 004	3.4400e- 003	2.7700e- 003	1.0000e- 005	5.8000e- 004	2.0000e- 005	6.1000e- 004	1.6000e- 004	2.0000e- 005	1.8000e- 004	0.0000	1.0978	1.0978	5.0000e- 005	0.0000	1.0990

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3.4 Building Construction - 2020

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					ton	s/yr							MT	/yr		
Off-Road	0.0975	0.7098	0.6330	1.0600e- 003		0.0382	0.0382		0.0369	0.0369	0.0000	87.1402	87.1402	0.0162	0.0000	87.5446
Total	0.0975	0.7098	0.6330	1.0600e- 003		0.0382	0.0382		0.0369	0.0369	0.0000	87.1402	87.1402	0.0162	0.0000	87.5446

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					ton	s/yr							МТ	/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	4.3000e- 004	0.0119	3.2600e- 003	3.0000e- 005	6.3000e- 004	6.0000e- 005	7.0000e- 004	1.8000e- 004	6.0000e- 005	2.4000e- 004	0.0000	2.6022	2.6022	1.2000e- 004	0.0000	2.6052
Worker	8.4000e- 004	7.8000e- 004	6.9900e- 003	2.0000e- 005	1.5300e- 003	1.0000e- 005	1.5400e- 003	4.1000e- 004	1.0000e- 005	4.2000e- 004	0.0000	1.4512	1.4512	6.0000e- 005	0.0000	1.4528
Total	1.2700e- 003	0.0127	0.0103	5.0000e- 005	2.1600e- 003	7.0000e- 005	2.2400e- 003	5.9000e- 004	7.0000e- 005	6.6000e- 004	0.0000	4.0534	4.0534	1.8000e- 004	0.0000	4.0580

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3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Off-Road	0.0975	0.7098	0.6330	1.0600e- 003		0.0382	0.0382	1 1 1	0.0369	0.0369	0.0000	87.1401	87.1401	0.0162	0.0000	87.5445
Total	0.0975	0.7098	0.6330	1.0600e- 003		0.0382	0.0382		0.0369	0.0369	0.0000	87.1401	87.1401	0.0162	0.0000	87.5445

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					ton	s/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	4.3000e- 004	0.0119	3.2600e- 003	3.0000e- 005	6.3000e- 004	6.0000e- 005	7.0000e- 004	1.8000e- 004	6.0000e- 005	2.4000e- 004	0.0000	2.6022	2.6022	1.2000e- 004	0.0000	2.6052
Worker	8.4000e- 004	7.8000e- 004	6.9900e- 003	2.0000e- 005	1.5300e- 003	1.0000e- 005	1.5400e- 003	4.1000e- 004	1.0000e- 005	4.2000e- 004	0.0000	1.4512	1.4512	6.0000e- 005	0.0000	1.4528
Total	1.2700e- 003	0.0127	0.0103	5.0000e- 005	2.1600e- 003	7.0000e- 005	2.2400e- 003	5.9000e- 004	7.0000e- 005	6.6000e- 004	0.0000	4.0534	4.0534	1.8000e- 004	0.0000	4.0580

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3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	8.4000e- 003	0.0845	0.0888	1.4000e- 004		4.7000e- 003	4.7000e- 003		4.3300e- 003	4.3300e- 003	0.0000	11.7657	11.7657	3.7300e- 003	0.0000	11.8589
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.4000e- 003	0.0845	0.0888	1.4000e- 004		4.7000e- 003	4.7000e- 003		4.3300e- 003	4.3300e- 003	0.0000	11.7657	11.7657	3.7300e- 003	0.0000	11.8589

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					ton	s/yr							МТ	/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	9.0000e- 005	2.4800e- 003	6.8000e- 004	1.0000e- 005	1.3000e- 004	1.0000e- 005	1.5000e- 004	4.0000e- 005	1.0000e- 005	5.0000e- 005	0.0000	0.5421	0.5421	3.0000e- 005	0.0000	0.5428
Worker	8.8000e- 004	8.1000e- 004	7.2800e- 003	2.0000e- 005	1.5900e- 003	1.0000e- 005	1.6000e- 003	4.2000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.5117	1.5117	7.0000e- 005	0.0000	1.5133
Total	9.7000e- 004	3.2900e- 003	7.9600e- 003	3.0000e- 005	1.7200e- 003	2.0000e- 005	1.7500e- 003	4.6000e- 004	2.0000e- 005	4.9000e- 004	0.0000	2.0538	2.0538	1.0000e- 004	0.0000	2.0561

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3.5 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Off-Road	8.4000e- 003	0.0845	0.0888	1.4000e- 004		4.7000e- 003	4.7000e- 003		4.3300e- 003	4.3300e- 003	0.0000	11.7657	11.7657	3.7300e- 003	0.0000	11.8589
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.4000e- 003	0.0845	0.0888	1.4000e- 004		4.7000e- 003	4.7000e- 003		4.3300e- 003	4.3300e- 003	0.0000	11.7657	11.7657	3.7300e- 003	0.0000	11.8589

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					ton	s/yr							МТ	/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	9.0000e- 005	2.4800e- 003	6.8000e- 004	1.0000e- 005	1.3000e- 004	1.0000e- 005	1.5000e- 004	4.0000e- 005	1.0000e- 005	5.0000e- 005	0.0000	0.5421	0.5421	3.0000e- 005	0.0000	0.5428
Worker	8.8000e- 004	8.1000e- 004	7.2800e- 003	2.0000e- 005	1.5900e- 003	1.0000e- 005	1.6000e- 003	4.2000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.5117	1.5117	7.0000e- 005	0.0000	1.5133
Total	9.7000e- 004	3.2900e- 003	7.9600e- 003	3.0000e- 005	1.7200e- 003	2.0000e- 005	1.7500e- 003	4.6000e- 004	2.0000e- 005	4.9000e- 004	0.0000	2.0538	2.0538	1.0000e- 004	0.0000	2.0561

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	со	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					ton	s/yr							МТ	/yr		
Mitigated	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
Unmitigated	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

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	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	0.538832	0.029687	0.203987	0.136286	0.023350	0.005751	0.018582	0.026631	0.004153	0.002845	0.007802	0.001241	0.000853

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	198.7222	198.7222	8.9900e- 003	1.8600e- 003	199.5009
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	198.7222	198.7222	8.9900e- 003	1.8600e- 003	199.5009
NaturalGas Mitigated	0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117
NaturalGas Unmitigated	0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
General Light Industry	2.18163e +006	0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117
Total		0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117

Mitigated

	NaturalGa s 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					ton	s/yr							MT	∵/yr		
General Light Industry	2.18163e +006	0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117
Total		0.0118	0.1069	0.0898	6.4000e- 004		8.1300e- 003	8.1300e- 003		8.1300e- 003	8.1300e- 003	0.0000	116.4199	116.4199	2.2300e- 003	2.1300e- 003	117.1117

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5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e		
Land Use	kWh/yr	MT/yr					
General Light Industry	683102	198.7222	8.9900e- 003	1.8600e- 003	199.5009		
Total		198.7222	8.9900e- 003	1.8600e- 003	199.5009		

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e		
Land Use	kWh/yr	MT/yr					
General Light Industry	683102	198.7222	8.9900e- 003	1.8600e- 003	199.5009		
Total		198.7222	8.9900e- 003	1.8600e- 003	199.5009		

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	СО	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	0.3806	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003
Unmitigated	0.3806	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	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	0.0575					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3230			 		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003
Total	0.3806	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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	0.0575					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e- 004	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003
Total	0.3806	1.0000e- 005	1.0600e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0500e- 003	2.0500e- 003	1.0000e- 005	0.0000	2.1900e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e				
Category	MT/yr							
-		0.0000	0.0000	0.0000				
Unmitigated		0.0000	0.0000	0.0000				

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
General Light Industry	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
General Light Industry	0/0	0.0000	0.0000	0.0000	0.0000		
Total		0.0000	0.0000	0.0000	0.0000		

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e			
	MT/yr						
miligutou	0.0000	0.0000	0.0000	0.0000			
Unmitigated	0.0000	0.0000	0.0000	0.0000			

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8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000			
Total		0.0000	0.0000	0.0000	0.0000			

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

ATTACHMENT 3

APPROVED MMRP FOR THE AQUIFER STORAGE AND RECOVERY PROJECT

Addendum No. 5 to the ASR EIR/EA Water Treatment Facility Modification

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Denise Duffy and Associates

Chapter 4 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

4-1

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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

4-2

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.

<u>Monitoring</u>: 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.-

<u>Monitoring</u>: 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 grounddisturbing 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. <u>Monitoring</u>: 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.

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

4-4

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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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 projectgenerated 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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 colorcorrected 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.

<u>Monitoring</u>: 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_xreducing 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 CEOA 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.

<u>Monitoring</u>: 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).

<u>Monitoring</u>: 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 implement until the young have fledged (as determined by a qualified biologist).

<u>Monitoring</u>: 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.

<u>Monitoring</u>: 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.

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