EXHIBIT 16-A

ADDENDUM TO THE AQUIFER STORAGE AND RECOVERY PROJECT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

AND THE

PURE WATER MONTEREY/GROUNDWATER REPLENISHMENT PROJECT ENVIRONMENTAL IMPACT REPORT

FOR THE

HILBY AVENUE PUMP STATION

June 14, 2016

Prepared for
Monterey Peninsula Water Management District

Prepared by
Denise Duffy and Assoicates

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

DD&A

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Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Avenue Pump Station

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Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Avenue Pump Station

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Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Avenue Pump Station

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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 following two certified Environmental Impact Reports:

- the Phase 1 Aquifer Storage and Recovery (ASR) Project Final Environmental Impact Report/Environmental Assessment (ASR EIR/EA), certified by MPWMD's Board of Directors on August 21, 2006, and revised by Addendum No. 1 to the ASR EIR/EA, certified by MPWMD's Board of Directors on April 16, 2012; and
- the Pure Water Monterey (PWM) Groundwater Replenishment (GWR) Project Final EIR, certified by MRWPCA's Board of Directors on October 8, 2015.

MPWMD has prepared this Addendum to the ASR EIR/EA and the PWM/GWR EIR to address the effects of constructing and operating the proposed Hilby Avenue Pump Station, which would constitute a change to both the ASR Project and the PWM/GWR Project. The proposed Hilby Avenue Pump Station has also been referred to as the "Monterey Pump Station" in joint supplemental testimony submitted to the California Public Utilities Commission (CPUC) on April 23, 2016, and as the "Alternative ASR Pump Station" in the PWM/GWR EIR.

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 in the Seaside Groundwater Basin (Seaside Basin) and injected under an authorization from the Environmental Protection Agency (EPA). The excess water is captured by CalAm wells in the Carmel Valley 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 Basin. Available storage capacity in the Seaside Basin serves as an underground reservoir for the diverted water. Water is then pumped back out from the Seaside 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 Basins. See **Figure 1. ASR and PWM/GWR Projects** for more information.

The proposed Hilby Avenue Pump Station is needed to provide sufficient pressure to enable conveyance of additional diverted Carmel River winter flows to the ASR injection wells, as allowed under the ASR Project. Other than providing sufficient pressure to convey additional diverted water, the Pump Station would not change operations of the ASR Project. The existing CalAm distribution system currently conveys Carmel River water through the Segunda-Crest pipeline network to the existing ASR facilities; however, the capacity of this pipeline constrains the volume of water that can be delivered to the injection wells.

The PWM/GWR Project is a water supply project that will provide purified recycled water for recharge of the Seaside Basin that serves as a drinking water supply, and recycled water to augment the existing Castroville Seawater Intrusion Project's crop irrigation supply. The PWM/GWR Project is jointly

sponsored by the Monterey Regional Water Pollution Control Agency (MRWPCA) and the MPWMD, and also includes participation by the City of Salinas, the Marina Coast Water District, and the Monterey County Water Resources Agency. The PWM/GWR Project includes the collection of a variety of new source waters and conveyance of that water to the Regional Wastewater Treatment Plant for treatment and recycling. The water would then be used for two purposes: replenishment of the Seaside Groundwater Basin with purified recycled water to replace some of CalAm's existing drinking water supplies; and provision of additional recycled water supply for agricultural irrigation in northern Salinas Valley. Water conveyed to the Seaside Basin would be injected into the basin via new wells. Water would subsequently be extracted through CalAm's existing extraction wells and conveyed to CalAm's customers. The PWM/GWR Project includes construction of a new pipeline, the Monterey Pipeline, to enable CalAm to deliver the water to its customers.

The proposed Hilby Avenue Pump Station is not needed for the PWM/GWR Project. However, the Hilby Avenue Pump Station would be connected to the Monterey Pipeline, which pipeline could then be used both for the ASR Project and the PWM/GWR Project. When CalAm is extracting water from Seaside Basin for delivery to its customers, the Monterey Pipeline would be used to distribute the water as described in the PWM/GWR EIR. When CalAm is diverting excess water from the Carmel River for injection into the Seaside Basin, the Monterey Pipeline would be used to convey a portion of the diverted water to the basin, consistent with the operational assumptions in the ASR EIR/EA. The PWM/GWR EIR identified the proposed Hilby Avenue Pump Station in Appendix Z, Sheet 3 as the "Alt ASR Pump Station" but it did not evaluate the effects of constructing and operating the Hilby Avenue Pump Station.

This Addendum evaluates whether construction and operation of the Hilby Avenue Pump Station would result in a new significant impact, or an impact that is substantially more severe than the impacts disclosed in the ASR EIR/EA and PWM/GWR EIR. This Addendum is supported by the **Attachment 1, Initial Study Checklist for the Hilby Avenue Pump Station**, 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 Hilby Avenue Pump Station.
- The proposed Hilby Avenue Pump Station would not result in a substantial increase in the severity of the impacts identified in the ASR EIR/EA and PWM/GWR Project EIR.

MPWMD's Board of Directors will consider this Addendum, along with the certified ASR EIR/EA and certified PWM/GWR EIR, prior to making a decision on any approvals pertaining to the proposed Hilby Avenue Pump Station.

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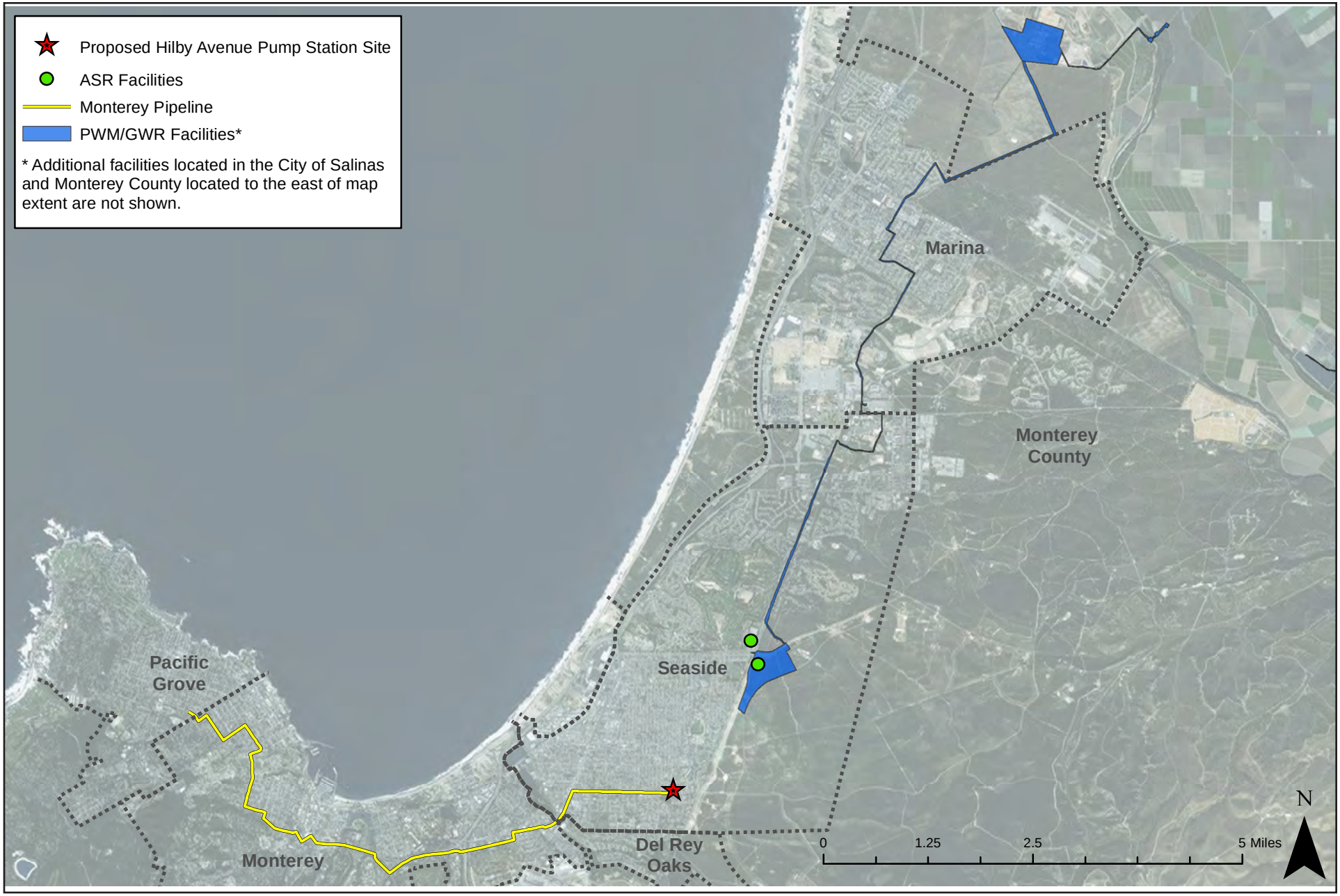

ASR and PWM/GWR Projects

Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Pump Station

Figure 1

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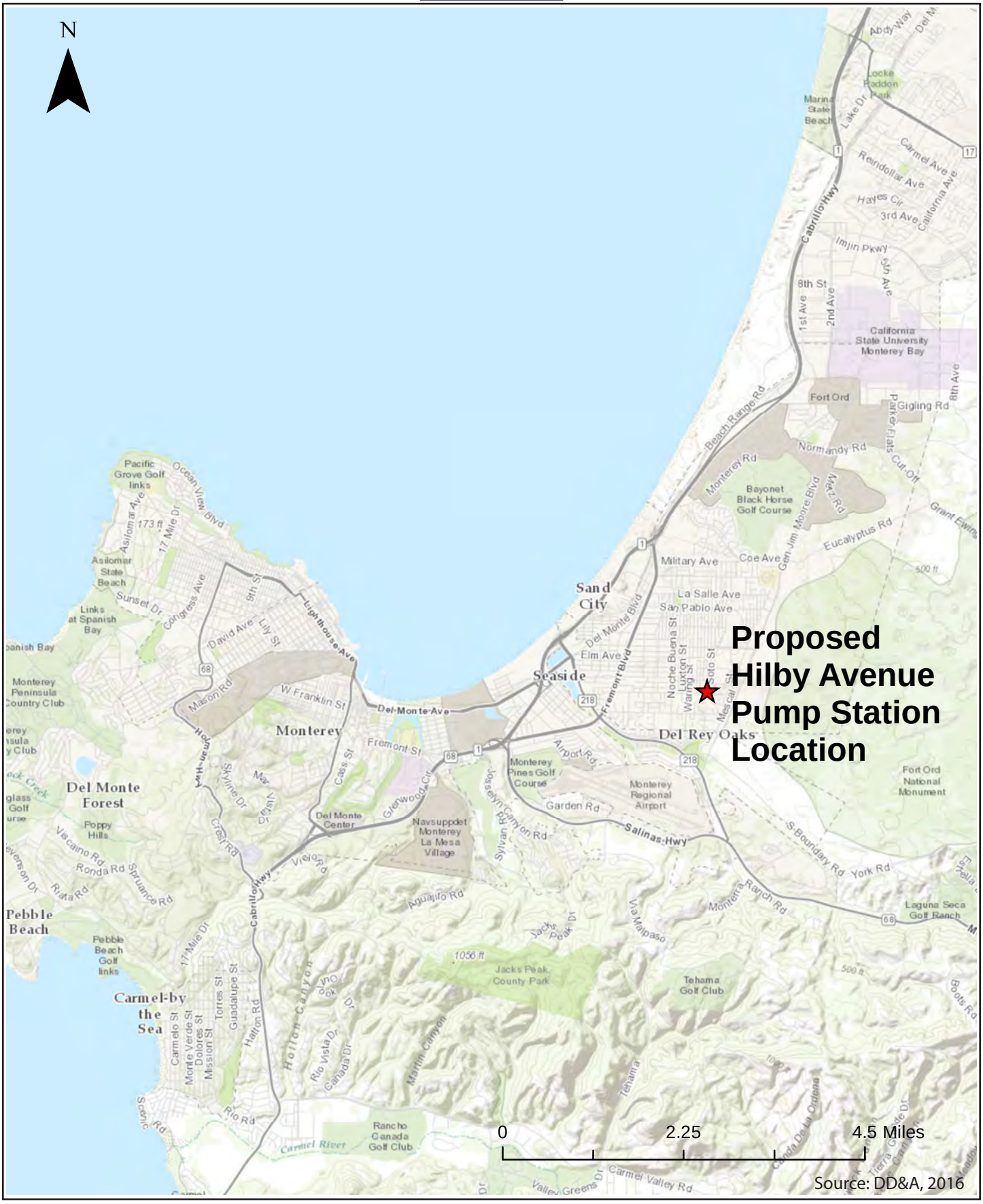

Project Location Map

Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Pump Station

Figure
2

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Proposed Hilby Pump Station Site Plan

Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Pump Station

Figure
3

EXHIBIT 16-A

Proposed Project site looking west towards Luzern Street

Proposed Project site looking east towards Yosemite Street

Source: DD&A, 2016

Site Photos

Addendum to the ASR EIR/EA and the PWM/GWR EIR
Hilby Pump Station

Figure
4

II. PUMP STATION LOCATION

The proposed Hilby Avenue Pump Station site consists of a 1.1-acre property owned by CalAm. **Figure 2, Project Location Map,** shows the location of the proposed Hilby Avenue Pump Station within the City of Seaside. The Pump Station above ground equipment would be constructed on an existing concrete pad foundation with a 1,222 square-foot footprint. The site is accessed from an existing driveway located in the west side of Luzern Street in the City of Seaside. The site is approximately 200 feet north of the Luzern Street/Hilby Avenue intersection. The proposed Hilby Avenue Pump Station site is located on Assessor's Parcel Number 012-324-032-000. Currently, there are two tanks (1 million gallons each) with an associated pump station and two pneumatic tanks to serve the adjacent community located just north of the site, and outdated equipment, which would be removed, on the existing concrete pad on the site.

III. PUMP STATION DESCRIPTION

The Hilby Avenue Pump Station is proposed by CalAm to pump water within a 36" diameter transmission main to existing ASR injection wells. The transmission main, also referred to as the Monterey Pipeline, was approved by the MRWPCA as a component of the PWM/GWR Project (see **Section IV. Changes to the Project** for more detail). The purpose of the Hilby Avenue Pump Station is to implement the ASR Project by providing sufficient pressure to provide additional water for injection into the Seaside Basin from the Carmel River to the ASR injection wells during wet weather periods consistent with the ASR operations described in the ASR EIR/EA, as modified by Addendum No. 1 to the ASR EIR/EA.[1]

The pump station equipment would be located in a newly constructed building with an approximate 1,222 square-foot footprint (26' wide, 47' long) and approximately 10 feet in height. It would be located at CalAm's existing Hilby Tank property on existing disturbed and paved areas, which is located at the intersection of Hilby Avenue and Luzern Street in the City of Seaside. There are current outdated facilities on the existing concrete pad at the site; these would be removed to allow construction of the new Pump Station. The property is zoned RS-8, single-family residential. The development of the Pump Station would require an amendment to the existing CalAm Water Distribution System (WDS) Permit to add the Pump Station. MPWMD would also amend this WDS Permit to the current ASR Project and related components, which were previously approved by MPWMD. A Use Permit from the City of Seaside may also be required. **Figure 2, Proposed Hilby Avenue Pump Station Site Plan**, presents the site plans for the Pump Station and associated distribution pipelines.

The Hilby Avenue Pump Station would have three, 3 MGD (million gallons per day) pumps with a rated combined 600 horsepower. Access to the Pump Station would be provided via the existing Hilby Tank driveway off of Luzern Street. The site is enclosed within a chain link security fence. Minor adjustments to the fence may be required to accommodate the new Pump Station. Electrical power equipment would be enclosed in a small building or panel with associated heating, ventilation, and air conditioning (HVAC) equipment. An electrical supply transformer would be located on an equipment pad near the Pump Station site.

[1] CalAm and MPWMD may, in the future, petition the SWRCB and EPA to add proposed ASR wells #5 and #6 as additional points of injection into the Seaside Basin for Carmel River diversions.

The pump motors and discharge piping would be housed within an enclosed building structure that is constructed on-site using split-faced block wall or built using pre-manufactured engineered structures and will incorporate acoustic sounds dampening materials and other engineered measures to mitigate sound attenuation outside the structure. The pump station building would be set at the approximately the same ground surface elevation as the existing paved area. The walls and roofing materials of the building housing the Pump Station would be constructed with architectural treatment as may be required and subject to approval by the City of Seaside.

The pipeline distribution system would include suction and discharge piping running between the proposed 36" Monterey Pipeline located on Hilby Avenue and the Hilby Avenue Pump Station that would be routed along Luzern Street before turning onto the existing Hilby storage tank site. This piping would be sized at 24" with a total length of approximately 700 feet as shown in **Figure 2, Proposed Hilby Avenue Pump Station Site Plan**. The PWM/GWR EIR analyzed use of the Monterey Pipeline for delivery of water within the CalAm distribution system. With the Hilby Avenue Pump Station, the Monterey Pipeline would also be used to convey water diverted from the Carmel River for injection via the ASR Project.

To the north of the proposed Pump Station site, there are two, 1 million gallon water tanks and a pump station which are owned and operated by CalAm. On the pavement area where the Pump Station is proposed, there are two outdated vertical turbine pumps that are used periodically for recirculation. These pumps are no longer needed for operation of the tanks with some minor piping modifications and will be removed prior to construction of the proposed Hilby Avenue Pump Station. See **Figure 3, Site Photos** for photos of the existing equipment.

1. Construction

An 8,400 square-foot construction area would be delineated at the site with temporary exclusion fencing to prevent inadvertent disturbance to adjacent, undeveloped portions of the property. Construction is anticipated to begin February 2017 and last until August 2017. Construction crews would prepare the Pump Station site by clearing, grading and compacting to create a level work area. Construction activities would include excavation; installing shoring and forms; pouring concrete footing for foundations; assembling and installing piping, pumps, and electrical equipment; constructing concrete enclosures and roofs; and finish work such as paving, landscaping, and fencing the perimeter of the Pump Station site. Construction access would be provided via existing driveways and roadways. The total volume of grading of the site would include approximately 2,500 cubic yards of cut and 2,000 cubic yards of fill. Cut and fill in the area of the Pump Station is 904 cubic yards cut and 724 cubic yards of fill. Piping and pipeline alignment grading involves 1,594 cubic yards of cut and total fill of 1,275 cubic yards. The excess cut material will be hauled off site to an appropriate location that will accept the spoils.

2. Operation

The Pump Station would be used to pressurize/convey potable water in the CalAm system to assist the existing ASR system during injection. The Pump Station will be used primarily during the wet weather period when excess water is permitted to be captured from the Carmel River and is conveyed to the Seaside Basin for aquifer storage and recovery. The electrical demand average would be approximately 500 mWh/year (Megawatt hours per year).

Although the Pump Station would typically be operated remotely via a supervisory control and data acquisition (SCADA) system, facility operators will conduct routine visits to the Pump Station site approximately once weekly to monitor operations, conduct general maintenance activities, and service

the pumps. General operations and maintenance activities associated with pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when necessary; inspection of valve vaults for leakage; testing, exercising and servicing of valves; vegetation maintenance along rights-of-way; and repairs of minor leaks in buried pipeline joints or segments.

IV. COMPARISON TO THE CONDITIONS LISTED IN CEQA GUIDELINES §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 §15162 calling for preparation of a subsequent EIR have occurred." CEQA Guidelines Section 15162 establishes the following criteria for the preparation of a Supplemental EIR.

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The following discussion summarizes the reasons why a subsequent or supplemental EIR, pursuant to CEQA Guidelines Section 15162, is not required in connection with approvals for the proposed Hilby Avenue Pump Station and why an addendum is appropriate.

V. CHANGES TO THE PROJECTS

1. Project Background

The proposed Hilby Avenue Pump Station would be connected to the Monterey Pipeline, previously evaluated as the Alternative Monterey Pipeline in the PWM/GWR EIR. The new Pump Station would serve the ASR Project, to enable the ASR Project to achieve the full yield authorized by previously approved water rights evaluated in the ASR EIR/EA and Addendum No. 1 to the ASR EIR/EA.[2]

The MPWMD and CalAm's water rights allow diversion of excess flows from the Carmel River for injection into the Seaside Groundwater Basin for later extraction and use by the CalAm. The Hilby Avenue Pump Station would constitute an added physical component to the ASR Project, but it would not change the amount of water allowed to be diverted from the Carmel River, injected into the Seaside Groundwater Basin and subsequently extracted by CalAm for municipal use.

Prior to constructing the Monterey Pipeline and Hilby Avenue Pump Station, CalAm would need to obtain MPWMD approval of an amendment to CalAm's existing WDS Permit.

The ASR EIR/EA and Addendum No. 1 to the ASR EIR/EA did not contemplate the addition of the Hilby Avenue Pump Station. The ASR EIR/EA and Addendum No. 1 to the ASR EIR/EA analyzed the impacts of diverting the full amount of Carmel River allowed to be diverted under MPWMD and CalAm's water rights, injection of that water into the Seaside Groundwater Basin and recovery of such water for CalAm use. The full ASR EIR/EA can be accessed online at the following address:
http://www.mpwmd.net/wp-content/uploads/2015/08/MPWMD-Draft-EIR-EA-3-06.pdf
and http://www.mpwmd.net/wp-content/uploads/2015/08/FEIR_8-21-06.pdf,
and Addendum No. 1 to that document can be found online at the following address: http://www.mpwmd.net/asd/board/boardpacket/2012/20120416/16/item16_exh16b.pdf.

This Addendum addresses the Hilby Avenue Pump Station and a short segment of suction and discharge piping that would connect the Hilby Avenue Pump Station to the previously approved Monterey Pipeline. The Monterey Pipeline was evaluated in the PWM/GWR EIR in **Chapter 6, Alternatives to the Proposed Project.** The PWM/GWR EIR can be accessed online at the following address: http://purewatermonterey.org/reports-docs/cfeir/.

2. Environmental Effects

As detailed in **Attachment 1, Initial Study Checklist for the Hilby Avenue Pump Station**, the proposed Hilby Avenue Pump Station 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 the PWM/GWR EIR. In addition, the proposed Hilby Avenue Pump Station would not substantially increase the severity of environmental effects identified in the ASR EIR/EA and the PWM/GWR EIR.

[2] State Water Resources Control Board (SWRCB) water rights are issued by the SWRCB Division of Water Rights and specify diversion limits on the Carmel River for ASR Phase 1 and ASR Phase 2. Phase 2 is facilitated by Amended Permit #20808C authorized by the SWRCB which allows MPWMD and CalAm to divert an additional maximum of approximately 2,900 acre-feet per year (AFY) for injection to the Seaside Basin via ASR facilities if minimum instream flow requirements in the permit are met. Thus the total maximum diversion is 5,326 SFY when the 2,426 AFY allowed for Phase 1 is considered. Full implementation of Phase 2 was estimated to yield an average of 1,000 AFY, which is additive to the estimated average yield of 920 AFY from Phase 1, resulting in an average reduction of 1,920 AFY in diversions from the Carmel Valley Alluvial Aquifer.

3. New Information

No new information of substantial importance has been identified or presented to MPWMD or MRWPCA such that the ASR Project or PWM/GWR Project would result in: 1) significant environmental effects not identified in the ASR EIR/EA and the PWM/GWR EIR, or 2) more severe environmental effects than described in the ASR EIR/EA and the PWM/GWR EIR, 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 the PWM/GWR EIR.

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 Hilby Avenue Pump Station;
- No substantial changes have occurred or would occur with respect to the circumstances under which the ASR Project and PWM/GWR Project were originally undertaken, which would require major revisions to the previously certified ASR EIR/EA and the PWM/GWR EIR 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 the PWM/GWR EIR were certified as complete.

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ATTACHMENT 1

INITIAL STUDY CHECKLIST FOR THE HILBY AVENUE PUMP STATION TO SUPPORT THE ADDENDUM TO THE ASR EIR/EA AND THE PWM/GWR EIR

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I. PROJECT DATA

Project Title: Hilby Avenue Pump Station

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

Contact Person and Phone Number: Larry Hampson, District Engineer (831) 658-5620

Project Proponents: MPWMD and California-American Water Company (CalAm)

Project Location: The proposed Hilby Avenue Pump Station is located at 1561 Hilby Avenue in the City of Seaside. The cross street is Luzern Street.

Project Description: CalAm proposes to construct and operate a new pump station near the corner of Luzern Street and Hilby Avenue in the City of Seaside.

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 Hilby Avenue Pump Station 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	☐Geology and Soils
☐Greenhouse Gas Emissions	☐Hazards and Hazardous Materials	☐Hydrology and Water Quality
☐Land Use and Planning	☐Mineral Resources	☒Noise
☐Population and Housing	☐Public Services	☐Recreation
☐Transportation and Traffic	☐Utilities and Service Systems	☐Mandatory Findings of Significance

III. EVALUATION OF ENVIRONMENTAL IMPACTS

1. Aesthetics

EXISTING SETTING

The existing site is located in a disturbed area near the corner of Luzern Street and Hilby Avenue in the City of Seaside. The project site is not located near a designated scenic corridor or vista. A portion of the site is paved, with the remaining area containing sparse vegetation. The surrounding area is residential. There are two, large water tanks directly north of the project site. The visual quality of the site is considered low, as it is disturbed and does not contain any unique or distinctive aesthetic elements. See

Figure 4, Site Photos for more details. The overall visual sensitivity of the site is considered moderate, as there are residences within close proximity (closest home is approximately 30 feet to the site).

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 on a scenic vista?	☐	☐	☐	☒
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 the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

The ASR EIR/EA identified a less than significant impact to scenic views, degradation of site visual character, creation of light and glare during construction activities, and alteration of existing visual character. The ASR EIR/EA identified a significant impact regarding 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. Addendum No. 1 to the ASR EIR/EA also identified a potentially significant impact resulting from 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.

The PWM/GWR EIR concluded that there would be less than significant impacts to scenic views, scenic resources, and the visual quality of surrounding areas during both construction and operation of the PWM/GWR project. The PWM/GWR EIR found that there would be significant impacts to aesthetic resources as a result of additional light and glare at the Booster Pump Station and the Injection Well Facility. These impacts could be reduced by the implementation of Mitigation Measure AE-2: Minimize Construction Nighttime Lighting, and Mitigation Measure AE-4: Exterior Lighting Minimization.

DISCUSSION

Construction of the Pump Station would last approximately 6 months. The Pump Station would be approximately 10 feet tall, 47 feet long, and 26 feet wide, and the building appearance would be typical of a public utility structure. The exterior of the Pump Station would be constructed of any number of dense, solid materials, including wood, metal, or concrete masonry unit.

a and b) No Impact. The proposed Hilby Avenue Pump Station site is not located within an area offering scenic vistas or resources and is not located within a scenic highway corridor.

c) Less than Significant Impact. Both the ASR EIR/EA and the PWM/GWR EIR identified less than significant impacts on potential degradation of the existing visual character or quality of the site and its surroundings. Similarly, the Pump Station would result in minimal changes to the visual character of the proposed site, as the existing site is currently highly disturbed and consists of existing infrastructure. In addition, the Pump Station site would be screened with vegetation along the existing fence line, and the

exterior of the Pump Station will be painted in natural green (same color as the existing tanks to the north of the site) to minimize aesthetic impact.

d) Less than Significant. Both the ASR EIR/EA and the PVM/GWR EIR identified potential environmental effects associated with the increase in new light and glare; however, these impacts would be reduced through the implementation of the mitigation measures described above. While both documents identified potential lighting/glare related effects, the proposed Hilby Avenue Pump Station would not have any potential adverse environmental effects since no lighting is proposed as part of the proposed Hilby Avenue Pump Station.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts to aesthetic resources. The Pump Station also will not contribute to significant impacts to aesthetic resources identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

2. Agricultural Resources

EXISTING SETTING

The proposed Hilby Avenue Pump Station site and its surrounding area do not contain agricultural or forest lands. The proposed Hilby Avenue Pump Station would have no impact on agricultural resources.

CHECKLIST

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?	☐	☐	☐	☒
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 or Addendum No. 1 to the ASR EIR/EA.

The PWM/GWR EIR concluded that there would be a less than significant impact resulting from indirect farmland conversion during project operation and that there would be a significant impact resulting from temporary farmland conversion during construction. This significant impact can be reduced to less than significant by the implementation of Mitigation Measure LU-1: Minimize Disturbance to Farmland.

DISCUSSION

a-e) No Impact. The proposed Hilby Avenue Pump Station site and its surrounding area do not contain agricultural or forest lands. The proposed Hilby Avenue Pump Station 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). The proposed Hilby Avenue Pump Station would not convert forest land or timberland or involve any other changes that would result in the conversion or loss of forest land. The proposed Hilby Avenue Pump Station would not result in any new significant impacts or cause an increase in severity of any significant impacts identified in the ASR EIR/EA or the PWM/GWR EIR.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe impacts to agricultural resources. The Pump Station also will not contribute to significant impacts to agricultural resources identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

3. Air Quality

EXISTING SETTING

The proposed Hilby Avenue Pump Station 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, with the Santa Clara Valley between them (Denise Duffy and Associates, 2015).

The proposed Hilby Avenue Pump Station area typically has average maximum and minimum winter (i.e., January) temperatures of 60 degrees Fahrenheit (ºF) and 43 ºF, respectively, while average summer (i.e., July) maximum and minimum temperatures are 68 ºF and 52 ºF, respectively. The proposed Hilby Avenue Pump Station site is within close proximity to the coast with temperature variations that are relatively moderate. Precipitation in the proposed Hilby Avenue Pump Station 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 proposed Hilby Avenue Pump Station area can generally be inferred from ambient air quality measurements conducted by MBARD at its closest station, the Salinas #3 monitoring station, located in the City of Salinas, east of East Laurel Drive and south of Constitution Boulevard. Data monitored at this station shows that although the area currently does not meet state standards for ozone, the number of days per year in exceedance of ozone standards has been decreasing, and the region is on course to meet these standards in the future.

CHECKLIST

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?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

The ASR EIR/EA identified potential adverse significant impacts during construction due to short-term emissions of PM_{10} (AQ-1, AQ-2, AQ-3), exposures of sensitive receptors (e.g. Seaside Middle School) to elevated health risks from exposure to diesel particulates (AQ- 4), and exposure of sensitive receptors to acrolein health hazards (AQ-5). 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.

The PWM/GWR EIR found that there would be less than significant impacts related to air quality resulting from criteria pollutants during operation, exposure of sensitive receptors during construction and operation, odors during construction and operation, or violation of air quality standards during operation. The PWM/GWR EIR found that there would be a potentially significant impact resulting from criteria pollutants during construction, this impact could be mitigated to less than significant levels by the implementation of Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan.

DISCUSSION

The Pump Station would have three, 3 MGD pumps with a rated combined 600 horsepower. The pump station would use 500 mWh/year of electricity.

a) Less than Significant Impact: CEQA Guidelines §15125(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, 2103) was approved in April of 2013. This plan addresses attainment of the State ozone standard and federal air quality standard. AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG) and other indicators. Consistency determinations are issued for commercial, industrial, residential, and infrastructure related projects that have the potential to induce population growth. A project is considered inconsistent with the AQMP if it has not been accommodated in the forecast projections considered in the AQMP. The proposed Hilby Avenue Pump Station 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, this project would not conflict with and/or otherwise obstruct the implementation of MBARD's AQMP.

b, c) Less than Significant Impact: The MBARD 2016 CEQA Air Quality 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 (NOx)
    - 137 pounds per day of reactive organic gases (ROG)
    - 82 pounds per day of respirable particulate matter (PM10)
    - 55 pounds per day of fine particulate matter (PM2.5)
    - 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 (NOx)
    - 137 pounds per day of reactive organic gases (ROG)
    - 82 pounds per day of PM10
    - 55 pounds per day of PM2.5
    - 550 pounds per day carbon monoxide (CO)
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard;
- Not result in a cumulatively considerable net increase of any criteria pollutant for with the project region is non-attainment;
- Not exceed the health risk public notification thresholds adopted by the Air District;
- 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 Air Quality Guidelines (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 applicable MBARD 82 lb/day threshold of significance and would constitute a less-than-significant effect for the purposes of CEQA (MBARD, 2008).

The proposed Hilby Avenue Pump Station would result in temporary increases in emissions of inhalable particulates ($PM_{2.5}$ and PM_{10}), VOC, and NO_x associated with construction-related activities, see **Table 1. Construction Air Pollutant Emissions for the Hilby Avenue Pump Station and the PWM/GWR Project** 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 Hilby Avenue Pump Station would be generated from project site grading and construction of the Pump Station. In addition to construction-related fugitive dust, exhaust emissions associated with

construction vehicles and equipment would also be generated. The construction area of the Hilby Avenue Pump Station is approximately 8,400 square feet, or 0.2 acres. Construction of the Pump Station will include limited grading and 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.

In addition, potential temporary air quality effects related to the proposed Pump Station are not anticipated to contribute to any construction-related air quality impacts associated with the construction of other project components of the ASR or GWR projects or other cumulative projects listed in the ASR EIR/EA and the PWM/GWR EIR. The construction emissions generated by the Pump Station 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 emission associated with the construction of the Hilby Avenue Pump Station 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. The construction emissions generated by the Pump Station may overlap with construction of PWM/GWR Project components. Construction of the Pump Station would last from February 2017 to August 2017. Construction of the PWM/GWR Project is anticipated to begin in the final quarter of 2016. As shown in **Table 1. Construction Air Pollutant Emissions for the Hilby Pump Station and the PWM/GWR Project**, construction of the Hilby Avenue Pump Station and the PWM/GWR Project would not exceed MBARD thresholds for emissions. Therefore, construction of the Pump Station would not contribute to the Impacts AQ-1 or AQ-2 identified in the PWM/GWR EIR.

Table 1. Construction Air Pollutant Emissions for the Hilby Avenue Pump Station and the PWM/GWR Project

	Emissions in Pounds/Day			
	NO_x	$PM_{2.5}$	PM_{10}	ROG
Significance Threshold (MBARD)	137*	55	82	137*
Emissions generated by the Hilby Avenue Pump Station	4.5	0.3	0.7	0.5
Average Emissions generated by PWM/GWR	225	11	12	24
Total Emissions	229.5	11.3	12.7	25.5
Exceed Threshold?	No	No	No	No

Emissions Source: Attachment 2, Air Quality and GHG Calculations Spreadsheets
Significance Threshold Source: MBARD, 2016
* Applies to non-typical construction equipment (i.e., well drilling) MBARD has identified that construction projects using typical construction equipment such as dump trucks, scrapers, bulldozers, compactors and front-end loaders that temporarily emit precursors of ozone (i.e., VOC or NOx), 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 proposed Hilby Avenue Pump Station operation would not result in a new or substantially more severe significant impact due to air quality emissions during operations. The pumps would be powered by electricity and would not result in onsite emissions of criteria air pollutants. Based upon the low level of operational emissions, operation of the proposed facilities would not result in emissions that would cause a new or substantially more severe impact based on an exceedance or violation of the applicable air quality standards.

d) Less than Significant Impact with Mitigation: The proposed Hilby Avenue Pump Station would be located on CalAm owned property, which is currently occupied with similar facilities. The site is adjacent to several residences, which are considered sensitive receptors (closest sensitive receptor is 1215 Yosemite Street, located 30 feet east of the site). There is an elevation difference and an earthen berm separating the residence from the construction area, however the project may create temporary construction dust given the proximity of the nearest residences. Implementation of Mitigation Measure AQ-1, which was previously approved as part of the PWM/GWR EIR, and Mitigation Measure AQ-1, which was previously approved as part of the ASR EIR/EA, and standard construction BMPs would minimize temporary emissions from construction. As a result, construction of the proposed Hilby Avenue Pump Station would not result in significant impacts to sensitive receptors.

e) No Impact. No substantial odors would be emitted from the proposed Hilby Avenue Pump Station site as a result of the proposed Hilby Avenue Pump Station implementation based upon the type of construction activities and project operations proposed.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts relating to air quality. Because the Hilby Avenue Pump Station could cause potentially significant air quality impacts during project construction (including dust), the following previously approved mitigation measures must be implemented:

Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan. (PWM/GWR EIR)

The following standard Dust Control Measures shall be implemented during construction to help prevent potential nuisances to nearby receptors due to fugitive dust and to reduce contributions to exceedances of the state ambient air quality standards for PM10, in accordance with MBARD's CEQA Guidelines.

a) Water all active construction areas as required with non-potable sources to the extent feasible; frequency should be based on the type of operation, soil, and wind exposure and minimized to prevent wasteful use of water.
b) Prohibit grading activities during periods of high wind (over 15 mph).
c) Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard.
d) Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
e) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
f) Enclose, cover, or water daily exposed stockpiles (dirt, sand, etc.);
g) Replant vegetation in disturbed areas as quickly as possible.
h) Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the AWT Facility site, the Injection Well Facilities, and the Booster Pump Station.

Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall also be visible to ensure compliance with MBARD rules.

Mitigation Measure AQ-1: Use Newer, Cleaner-Burning Engines. (ASR EIR/EA)

The project applicant will encourage all construction contractors that use equipment with diesel engines to use as much equipment as possible that meets EPA Tier II engine standards. The project applicant will also encourage construction contractors to install diesel particulate matter filters and lean-NOx or diesel oxidation catalysts in all equipment, especially equipment that doesn't meet Tier II engine standards.

4. Biological Resources

EXISTING SETTING

The proposed Hilby Avenue Pump Station site is disturbed and the majority of the site has been previously paved over. The area surrounding the project site is comprised mostly of ruderal vegetation (Davis, 2016). In a survey performed by DD&A biologist on May 12, 2014, Monterey spineflower (*Chorizanthe pungens* var. *pungens)* was identified within the parcel, outside the limits of the proposed construction. No special-status plant species were identified within the proposed limits of construction. Although the proposed Hilby Avenue Pump Station site is within the vicinity of the Fort Ord Habitat Management Plan Area (HMP) (Department of the Army, 2005), it is not within the Plan Area and therefore is not subject to the policies of any HMP or Habitat Conservation Plan (HCP).

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 as defined by Section 404 of the Clean Water Act (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 Resource Management Area (NRMA) and potential loss of nest trees and disturbance or mortality of migratory birds. Mitigation Measures BIO-1 and BIO-2 were 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 and AR-2 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.

The PWM/GWR EIR concluded that potentially significant impacts to fisheries resources (due to habitat modification during construction of the diversion facilities) could be reduced to less than significant levels through the implementation of Mitigation Measure BT-1: Implement Construction Best Management Practices, Mitigation Measure BF-1: Construction During Low Flow Season, Mitigation Measure BF-1b: Relocation of Aquatic Species during Construction, and Mitigation Measure BF-1c: Tidewater Goby and Steelhead Impact Avoidance and Minimization. The PWM/GWR EIR also found that there would be a significant impact due to interference with fish mitigation, this impact could be reduced to less than significant with either the implementation of Mitigation Measure BF-2a: Maintain Migration Flows, or Mitigation Measure Alternate BF-2a: Modify San Jon Weir. The PWM/GWR EIR determined that there would be significant impacts during project construction due to impacts to special-status species and habitat, sensitive habitats, and conflicts with local policies. These impacts could be reduced to a less than significant level through the implementation of Mitigation Measure BT-1a: Implement Construction Best Management Practices, Mitigation Measure BT-1b: Implement Construction-Phase Monitoring, Mitigation Measure BT-1c: Implement Non-Native, Invasive Species Controls, Mitigation Measure BT-1d: Conduct Pre-Construction Surveys for California Legless Lizard, Mitigation Measure BT-1e: Prepare and Implement Rare Plant Restoration Plan to Mitigate Impacts to Sandmat Manzanita, Monterey Ceanothus, Monterey Spineflower, Eastwood's Goldenbush, Coast Wallflower, and Kellogg's Horkelia, Mitigation Measure BT-1f: Conduct Pre-Construction Protocol-Level Botanical Surveys within the Product Water Conveyance: Coastal Alignment Option between Del Monte Boulevard and the Regional Treatment Plant site on Armstrong Ranch; and the remaining portion of the Project Study Area within the Injection Well Facilities site, Mitigation Measure BT-1g: Conduct Pre-Construction Surveys for Special-Status Bats, Mitigation Measure BT-1h: Implementation of Mitigation Measures BT-1a and BT-1b to Mitigate Impacts to the Monterey Ornate Shrew, Coast Horned Lizard, Coast Range Newt, Two-Striped Garter Snake, and Salinas Harvest Mouse, Mitigation Measure BT-1i: Conduct Pre-Construction Surveys for Monterey Dusky-Footed Woodrat, Mitigation Measure BT-1j: Conduct Pre-Construction Surveys for American Badger, Mitigation Measure BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark, Mitigation Measure BT-1l: Conduct Pre-Construction Surveys for Burrowing Owl. Mitigation Measure BT-1m: Minimize effects of nighttime construction lighting, Mitigation Measure BT-1n: Mitigate Impacts to Smith's blue butterfly, Mitigation Measure BT-1o: Avoid and Minimize Impacts

to Monarch butterfly, Mitigation Measure BT-1p: Avoid and Minimize Impacts to Western Pond Turtle, Mitigation Measure BT-1q: Avoid and Minimize Impacts to California Red-Legged Frog, Mitigation Measure BT-2a: Avoidance and Minimization of Impacts to Riparian Habitat and Wetland Habitats, Mitigation Measure BT-2b: Avoidance and Minimization of Impacts to Central Dune Scrub Habitat, Mitigation Measure BT-2c: Avoidance and Minimization of Construction Impacts Resulting from Horizontal Directional Drilling under the Salinas River, and Mitigation Measure BT-4. HMP Plant Species Salvage. Lastly, the PWM/GWR EIR found that there would be a significant impact to sensitive habitats during operation, this impact could be reduced to less than significant with the implementation of Mitigation Measure: BT-1: Implement Construction Best Management Practices.

DISCUSSION

During construction of the Pump Station, the construction area would be marked with temporary exclusion fencing to prevent inadvertent disturbance to adjacent, undeveloped portions of the property.

a) Less than Significant Impact with Mitigation: A biological survey was performed on the site in spring of 2014. The survey concluded that the project site is highly disturbed and the portion of the site that is not paved is comprised of ruderal vegetation. Monterey spineflower was identified within the project parcel, outside of the proposed limits of construction. Monterey spineflower is a federally threatened species. Although Monterey spineflower was located on the parcel, no Monterey spineflower were observed within the limits of construction. Overall, the proposed Hilby Avenue Pump Station would not adversely affect biological resources such that a new or more severe impact would occur beyond those identified in the ASR EIR/EA and the PWM/GWR EIR. In order to avoid potential impacts to Monterey spineflower in the vicinity, Mitigation Measure BT-1a: Implement Construction Best Management Practices, previously approved as part of the PWM/GWR EIR shall be implemented. The proposed development would not significantly increase the severity of significant impacts previously identified and would not result in additional significant impacts beyond those identified in the ASR EIR/EA and the PWM/GWR EIR.

b, c, d) No Impact: There is no riparian habitat, sensitive natural community or wetlands located within the vicinity of the Proposed Hilby Avenue Pump Station. The Pump Station site is highly disturbed and would not interfere with the movement of any wildlife species.

e, f) No Impact: The proposed Hilby Avenue Pump Station would not conflict with local policies protecting biological resources. No tree removal would be associated with the proposed development and the proposed Hilby Avenue Pump Station site is not located within the boundaries of any adopted habitat management or conservation plan area.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe impacts to biological resources. Because the Pump Station could potentially contribute to previously identified significant impacts to Monterey spineflower, the following previously approved mitigation measure must be implemented:

Mitigation Measure BT-1a: Implement Construction Best Management Practices. (PWM/GWR EIR)

The following best management practices shall be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:

1) A qualified biologist must conduct an Employee Education Program for the construction crew prior to any construction activities. A qualified biologist must meet with the construction crew at the

onset of construction at the site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which would ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the site.

2) Trees and vegetation not planned for removal or trimming shall be protected prior to and during construction to the maximum extent possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw shall be used, to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
3) Protective fencing shall be placed prior to and during construction to keep construction equipment and personnel from impacting vegetation outside of work limits. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
4) Following construction, disturbed areas shall be restored to pre-construction contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist.
5) Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-,during, and post-construction).
6) No firearms shall be allowed on the construction sites at any time.
7) All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area.
8) To protect against spills and fluids leaking from equipment, the project proponents shall require that the construction contractor maintains an on-site spill plan and on-site spill containment measures that can be easily accessed.
9) Refueling or maintaining vehicles and equipment should only occur within a specified staging area that is at least 100 feet from a waterbody (including riparian and wetland habitat) and that has sufficient management measures that will prevent fluids or other construction materials including water from being transported into waters of the state. Measures shall include confined concrete washout areas, straw wattles placed around stockpiled materials and plastic sheets to cover materials from becoming airborne or otherwise transported due to wind or rain into surface waters.
10) The project proponents and/or their contractors shall coordinate with the City of Seaside on the location of the Pump Station and the removal of sensitive biotic material.

5. Cultural Resources

EXISTING SETTING

The proposed Hilby Avenue Pump Station site was surveyed by Environmental Science Associates (ESA), and no cultural resources were identified at the site. Topographic maps from 1970 through 1985 and an aerial photograph from 1968, shows a small tank at this location. It is likely that the existing stairs and concrete foundations currently on the site were associated with this small tank (Koenig, 2016).

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 as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

Both the ASR EIR/EA and Addendum No. 1 to the ASR EIR/EA noted 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 and CR-2 were presented and adopted to reduce potential impacts to a less than significant level.

Similar to the ASR Project, the PWM/GWR EIR concluded that project construction could result in a significant impact due to the potential for discovery of buried unknown cultural deposits and human remains during construction activities, but that this impact could be reduced with the implementation of Mitigation Measure CR-1: Avoidance and Vibration Monitoring for Pipeline Installation in the Presidio of Monterey Historic District, and Downtown Monterey, Mitigation Measure CR-2a: Archaeological Monitoring Plan, Mitigation Measure CR-2b: Discovery of Archaeological Resources or Human Remains, and Mitigation Measure CR-2c: Native American Notification.

DISCUSSION

a) No Impact: The proposed Hilby Avenue Pump Station would not impact historic resources; there are no documented historical resources on the proposed Hilby Avenue Pump Station site or in the vicinity.

b) Less than Significant Impact with Mitigation: Ground disturbing activities could potentially unearth unknown archaeological resources. However, the proposed Hilby Avenue Pump Station area has previously been surveyed for nearby and adjacent projects, and there is a low possibility of archaeological resources to be present at the proposed Hilby Avenue Pump Station site. In addition, the site is considered highly disturbed due to construction of previous facilities on the site. The Pump Station would be located on the existing concrete pad on the site, and there would be minimal, if any, ground disturbing activities on the surrounding, unpaved, area. The chance for uncovering unknown

resources is low. While previously unknown or buried archaeological resources are not anticipated to be encountered during project construction, the implementation of Mitigation Measures CR-1 and CR-2, previously approved 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 Hilby Avenue Pump Station would not result in any new or substantially more severe significant impacts beyond those identified in the ASR EIR/EA and the PWM/GWR EIR. No additional mitigation would be necessary beyond those measures already identified.

c) No Impact: There are no known paleontological resources on the proposed Hilby Avenue Pump Station site that would be disturbed by implementation of the proposed Hilby Avenue Pump Station based on lack of previously identified paleontological resources on the site or in the vicinity.

d) Less than Significant Impact with Mitigation: Implementation of the proposed Hilby Avenue Pump Station 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 and CR-2, previously approved as part of the ASR EIR/EA and described below, would reduce the potential impact to a less than significant level. The proposed Hilby Avenue Pump Station would not result in any new or more severe significant impacts than those identified in the ASR EIR/EA and the PWM/GWR EIR. No additional mitigation would be necessary beyond those identified.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe impacts to cultural resources. Because the Pump Station could potentially contribute to previously identified significant impacts to unknown cultural resources, the following previously approved mitigation measures must be implemented:

Mitigation Measure CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction Activities. (ASR EIR/EA)

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

Mitigation Measure CR-2: Stop Work If Human Remains Are Encountered during Construction Activities. (ASR EIR/EA)

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.

6. Geology and Soils

EXISTING SETTING

The proposed Hilby Avenue Pump Station is located on undifferentiated eolian deposits, which are characterized by weakly to moderately consolidated soils, and has a low susceptibility to liquefaction. The Ord Terrace Fault is located to the north of the project site, and the Seaside Fault is located to the south of the project site. The site is within an area of low susceptibility to earthquake induced landsliding, and moderate risk of erosion hazards (Ninyo and Moore, 2014).

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
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?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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 risks to life or property?	☐	☐	☐	☒

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?	☐	☐	☐	☒

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.

Due to the proximity to the coast of a portion of the Monterey Pipeline that was evaluated in the PWM/GWR EIR, the PWM/GWR EIR concluded that a significant impact could result from exposure to coastal erosion and sea level rise, but found that this impact could be reduced to less than significant with the implementation of Mitigation Measure GS-5: Monterey Pipeline Deepening. However, the Monterey Pipeline alignment that was evaluated in the PWM/GWR EIR is no longer being used, as the Alternate Monterey Pipeline (referred to as the "Monterey Pipeline" in this analysis) that was evaluated in the PWM/GWR EIR was selected by the MRWPCA Board. Therefore, this impact is no longer relevant to the PWM/GWR Project. The Monterey Pipeline is shown in **Figure 1. ASR and PWM/GWR Projects**, in the Addendum to the PWM/GWR EIR and the ASR EIR/EA for the Hilby Avenue Pump Station.

DISCUSSION

a, b, c) Less than Significant: The proposed Hilby Avenue Pump Station is not located near the coast and would not result in any new or more severe significant impacts beyond those identified in the ASR EIR/EA and no mitigation is required.

d, e) No Impact: The proposed Hilby Avenue Pump Station site is not located on expansive soils and the proposed Hilby Avenue Pump Station does not involve septic or alternative wastewater disposal systems.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to geology and soils. The Pump Station also will not contribute to significant impacts to geology and soils identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

7. Greenhouse Gas Emissions

EXISTING SETTING

Global temperatures are affected by naturally occurring and anthropogenic-generated (generated by humankind) 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 (GHG). 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.

CHECKLIST

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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

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 identified a less than significant impact related to the generation of GHGs. That project would generate a minor amount of GHG emissions, directly during construction and indirectly through electricity demand and vehicular access to the site during operation. The PWM/GWR EIR did not find any significant impacts related to greenhouse gas emissions. The PWM/GWR project would not make a considerable contribution to significant cumulative impacts of greenhouse gas emissions and the related global climate change impacts.

DISCUSSION

a) Less Than Significant: Construction and operation of the proposed Hilby Avenue Pump Station would generate a minor amount of GHG emissions, directly during construction.

Construction

The MBARD does not have an adopted or recommended quantified threshold of significance for assessing the potential GHG emissions during construction. MBARD staff recommends including construction emissions within operational totals based on a 30-year amortization period to provide a full analysis of construction and operational GHG emissions (Clymo, Amy, 2014). Construction of the PWM/GWR Project would result in a one-time emission total of up to 6,039 MT of CO_{2eq} (metric tons of carbon dioxide equivalent) during the 18 month construction period, and construction of the Hilby Avenue Pump Station would result in a one-time emission total of up to 56.22 MT of CO_{2eq} during the 6 month construction period. (This information is not available for the ASR Project, as CEQA did not require an analysis of GHG emissions at the time that document was written; therefore this analysis will not include that project.) The total construction period emissions from the PWM/GWR Project and Hilby

Avenue Pump Station were amortized over a 30-year life and the resulting average annual emissions were added to the annual operational emissions and compared to the GHG significance threshold. The annual amortized GHG emissions for the PWM/GWR Project are 201 MT/year, and the annual amortized GHG emissions for the Hilby Avenue Pump Station are 1.87 MT/year.

Operation

As of June 2016, MBARD has not adopted significance thresholds for GHG emissions. In February 2013, MBARD staff presented threshold options to the MBARD Board and an analysis of the options evaluated. In February 2014, MBARD staff proposed the following options for operational significance thresholds for land use projects: (1) a bright-line threshold of 2,000 metric tons CO_{2eq} per year, (2) incorporation of mitigation measures to reduce GHG emissions by 16%, or (3) compliance with an applicable adopted GHG reduction plan/climate action plan (Monterey Bay Air Resources District, 2014). There are no adopted GHG reduction plans or climate action plans that would apply to the Hilby Avenue Pump Station; therefore the third option would not be applicable. A threshold of 10,000 metric tons CO_{2eq} per year was recommended for stationary source projects that are subject to MBARD permitting requirements; however, the Hilby Avenue Pump Station is not considered a stationary source project so this threshold would not be applicable to this analysis.

The evidence supporting the MBARD staff recommendations in February 2013 and February 2014 is considered by MPWMD to constitute substantial evidence. Based on the evidence provided by the MBARD staff recommendation, this Addendum first considers whether the Hilby Avenue Pump Station GHG emissions would be below 2,000 MT of CO_{2eq} per year including amortized construction emissions. If project GHG emissions are below 2,000 MT of CO_{2eq} per year the project would be considered to have less-than-significant GHG emissions. A less-than-significant impact would mean that the Hilby Avenue Pump Station would not make a cumulatively considerable contribution to the environmental effects related to emitting GHGs (i.e., climate change and the associated adverse effects of climate change).

Operation and maintenance of the Hilby Avenue Pump Station would not require additional employee vehicle trips. There are existing CalAm facilities adjacent to the site that require routine maintenance. As a result, no additional operational GHG emissions associated with vehicular traffic are anticipated in connection with the operation of the Hilby Avenue Pump Station. The mobile emissions resulting from operation of the PWM/GWR Project are shown in **Table 2. GHG Emissions for the Hilby Avenue Pump Station and the PWM/GWR Project.**

Indirect GHG emissions from energy usage at the Pump Station would occur. Anticipated electricity demand (mWh/year) was used to calculate annual GHG emissions using emissions rates published for PG&E's projected 2018 CO_2 intensity rate. This 2018 rate is based, in part, on the requirement of a renewable energy portfolio standard of 33% by the year 2020. With incorporation of the energy saving features, the PWM/GWR Project is anticipated to have an energy demand of 10,952 mWh/year. The Hilby Avenue Pump Station is anticipated to have an energy demand of 500 mWh/year.

Table 2, GHG Emissions for the Hilby Avenue Pump Station and the PWM/GWR Project, below summarizes computed annual GHG emissions due to operation of the projects. As shown in **Table 2**, annual GHG emissions would be below the project-specific GHG significance threshold of 2,000 MT CO_{2eq} per year (maximum of 1,979 MT/year). Therefore, the combined impacts of the PWM/GWR Project and Hilby Avenue Pump Station would not make a cumulatively considerable contribution to any significant global climate change impacts and, thus, would have a less-than-significant impact due to GHG emissions. No mitigation measures would be required to reduce GHG emissions.

Table 2. GHG Emissions for the Hilby Avenue Pump Station and the PWM/GWR Project

	Electricity Demand (mWh/year)	CO_{2eq} (MT/year)
Construction Emissions of Hilby Avenue Pump Station amortized over 30 years	-	2
Operational Hilby Avenue Pump Station Electricity Demand	500	77
Operational Hilby Avenue Pump Station Mobile Emissions	-	-
Construction Emissions of PWM/GWR Project amortized over 30 years	-	201
Operational PWM/GWR Project Electricity Demand	10,952	1,642
Operational PWM/GWR Mobile Emissions	-	57
Total Emissions	-	1979
Emissions Source: Attachment 2, Air Quality and GHG Calculations Spreadsheets		

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

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to greenhouse gas emissions and no mitigation is warranted.

8. Hazards and Hazardous Materials

EXISTING SETTING

A search of the California Department of Toxic Substances Control, EnviroStor database shows that there are no contaminated cleanup sites within proximity to the proposed Hilby Avenue Pump Station site (California Department of Toxic Substances Control, 2016). The proposed Hilby Avenue Pump Station site is not within the Former Fort Ord.

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?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures 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 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 additional potentially significant impacts related to hazards and hazardous materials.

The PWM/GWR EIR concluded that there would be a significant impact related to the potential for accidental release of hazardous materials during construction, this impact could be reduced to less than significant with the implementation of Mitigation Measure HH-2a: Environmental Site Assessment, Mitigation Measure HH-2b: Health and Safety Plan, and Mitigation Measure HH-2c: Materials and Dewatering Disposal Plan.

DISCUSSION

a, b, c) Less than Significant: The proposed Hilby Avenue Pump Station site is located within ¼ mile of an existing or proposed school. Highland Elementary School is located approximately 0.15 miles northeast of the project site, and Kid's at Play Children's Center, a preschool, is located approximately 0.15 miles southeast of the project site. However, construction and implementation of the proposed Hilby Avenue Pump Station would not result in exposure of the school facilities' students, staff, or faculty to hazardous materials, substances, or wastes. In addition, no hazardous materials would be stored on site. Therefore, there would be no new significant impacts or increase in severity of any previously identified significant impacts.

d, e, f) No Impact: The proposed Hilby Avenue Pump Station site is not included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and the proposed Hilby Avenue Pump Station site is not located within two miles of a municipal or private airport.

g, h) No Impact: Implementation of the proposed Hilby Avenue Pump Station would not interfere with evacuation plans because it involves no construction or operational activities that would block transportation pathways. The proposed Hilby Avenue Pump Station would not expose people or structures to a significant risk from wildland fires because it is surrounded by urban development.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to hazards and hazardous materials. The Pump Station also will not contribute to significant impacts associated with hazardous materials identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

9. Hydrology and Water Quality

EXISTING SETTING

The proposed Hilby Avenue Pump Station site is essentially flat and lies at the top of a small hill in a developed area, at an elevation of about 248 feet above mean sea level. Storm runoff from the project site currently is directed offsite and flows to the existing drainage gutters on Luzern Street. The Hilby Pump Station site would be located primarily on an impervious surface (existing concrete pad). The project site does not contain any natural drainages or waterways, and does not contain any trees.

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?	☐	☐	☒	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

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. Mitigation Measures GWH-1, GWH-2, GWH-3, and GWH-4 were recommended for the ASR Project; however, no significant impacts requiring mitigation were identified. Addendum No. 1 to the ASR EIR/EA did not identify any additional significant impacts related to hydrology and water quality.

The PWM/GWR EIR concluded that there would be a significant impact on surface water hydrology and water quality during the construction of the source water diversions, however, this impact could be reduced to less than significant with the implementation of Mitigation Measure HS-4: Management of Surface Water Diversion Operations. The PWM/GWR project would result in beneficial impacts to the surface water flows of Carmel River. In addition, the PWM/GWR EIR found that the project would result in beneficial impact to both groundwater levels and overall quality in the Salinas Valley Groundwater Basin and the Seaside Basin.

DISCUSSION

a) Less Than Significant: proposed Hilby Avenue Pump Station construction activities would occur primarily on an existing concrete pad. Because the area of disturbance is less than one acre, the proposed Hilby Avenue Pump Station would not be subject to the NPDES Construction General Permit and the Municipal Stormwater Permit requirements (including the preparation of a Stormwater Pollution Prevention Plan or SWPPP).

b) No Impact: The proposed Hilby Avenue Pump Station would not deplete groundwater supplies, as it is a pump station.

c, d, e, f, g, h, i, j) No Impact: The proposed Hilby Avenue Pump Station site does not contain drainages, floodways, or floodplain areas according to the Flood Insurance Rate Maps (FIRM) applicable to the proposed Hilby Avenue Pump Station site (FEMA, 2009). Implementation of the proposed Hilby Avenue Pump Station would not significantly alter the drainage scheme on the site or substantially increase runoff; there would be no little impervious area at the site, as the Pump Station would be built primarily on the existing concrete pad. The proposed Hilby Avenue Pump Station does not include residential housing. The proposed Hilby Avenue Pump Station 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).

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to hydrology and water quality. The Pump Station also will not contribute to significant impacts to hydrology identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

10. Land Use and Planning

EXISTING SETTING

The proposed Hilby Avenue Pump Station site is located on APN 012-324-032-000 and is owned by CalAm. 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). The site borders Hilby Avenue but is accessed from Luzern Street. The CalAm facilities on the site are located within an established residential neighborhood.

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?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

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.

The PWM/GWR EIR concluded that that PWM/GWR project would be consistent with plans, policies, and regulations, with the implementation of the mitigation measures referenced in that document.

DISCUSSION

a) No Impact: Implementation of the proposed Hilby Avenue Pump Station would not physically divide an established community. The existing facilities and proposed facilities will be contained on the less than one acre site along an existing roadway.

b) Less than Significant: The proposed Hilby Avenue Pump Station property is designated by the City of Seaside General Plan as Low Density Single Family Residential and the installation of public utility infrastructure on the proposed Hilby Avenue Pump Station site would be a compatible use. The project

proponent will obtain all necessary permits from the City of Seaside prior to commencing construction of the Pump Station. All City of Seaside policies and ordinances would be adhered to.

c) No Impact: The proposed Hilby Avenue Pump Station site is not located within any conservation plan area.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to land use and planning. The Pump Station also will not contribute to significant impacts related to land use and planning identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

11. Mineral Resources

EXISTING SETTING

The proposed Hilby Avenue Pump Station site is not located in an area containing mineral resources, therefore a discussion of the existing setting is not included.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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, Addendum No. 1 to the ASR EIR/EA, or the PWM/GWR EIR.

DISCUSSION

a, b) No Impact: The proposed Hilby Avenue Pump Station site is not located in an area of potential mineral resources; the proposed Hilby Avenue Pump Station would not impact mineral resources.

The proposed Hilby Avenue Pump Station would not result in any impacts to mineral resources and no mitigation is warranted.

12. Noise

EXISTING SETTING

The project site is located within the existing CalAm Hilby Tank Facility, which is located adjacent to a residential neighborhood. There are currently pumps and motors associated with the tanks in operation at the facility, which generate a minimal amount of noise. The closest residences to the proposed Hilby Avenue Pump Station site are located at 1215 Yosemite Street (30 feet to the east), 1205 Yosemite Street (80 feet to the southeast), and 1225 Luzern Street (115 feet to the west).

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, 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. Mitigation Measures NZ-1a, NZ1-b, NZ1-c, NZ1-d and NZ-2 were identified to reduce impacts to a less than significant level. In addition, Addendum No. 1 to the ASR EIR/EA identified a potentially significant impact resulting from 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 on Mitigation Measure NV-1a, Mitigation Measure NV-1b, Mitigation Measure NV-1c, and Mitigation Measure NV-1d.

The PWM/GWR EIR concluded that there would be a significant and unavoidable impact due to noise generated during construction of the Tembladero Slough diversion and Monterey Pipeline. Although the impact may not be reduced to less than significant levels, implementation of Mitigation Measure NV-1a: Drilling Contractor Noise Measures, Mitigation Measure NV-1b: Monterey Pipeline Noise Control

Plan for Nighttime Pipeline Construction, Mitigation Measure NV-1c: Neighborhood Notice, Mitigation Measure NV-1d: RUWAP Pipeline Construction Noise, Mitigation Measure NV-2a: Construction Equipment, and Mitigation Measure NV-2b: Construction Hours, would reduce the severity of the impact.

DISCUSSION

a, d) Less Than Significant Impact with Mitigation: Project construction would generate temporary increases in noise associated with the use of construction equipment. Project construction could result in the exposure of adjacent and nearby sensitive receptors to increased noise levels and ground-borne vibration beyond existing conditions. These impacts would, however, be temporary. In addition, adherence to standard construction noise measures would further reduce noise impacts, including reducing the severity of impacts on adjacent noise sensitive uses. Nosie from construction would be reduced to a less than significant level through the implementation of Mitigation Measures NZ-1a, NZ1-b, and NZ1-c, previously approved as part of the ASR EIR/EA, and described below.

Project-specific design features (e.g. sound-proof enclosures) would ensure that operational impacts of the Proposed Hilby Avenue Pump Station would be less than significant (See **Attachment 3, Hilby Avenue Pump Station Noise Technical Memorandum**). Based upon existing mitigation measures and the construction plan of the proposed development, the proposed Hilby Avenue Pump Station would not result in significant new impacts or an increase in severity of identified in the ASR EIR/EA and the PWM/GWR EIR. No additional mitigation would be necessary beyond those measures already identified in the ASR EIR/EA and the PWM/GWR EIR as described above.

b) Less than Significant Impact: The proposed Hilby Avenue Pump Station would not generate any groundborne vibration.

c) Less than Significant Impact: The Proposed Hilby Avenue Pump Station has been designed to minimize noise generated by the pumps and motors of the Pump Station. The Pump Station enclosure would have the following characteristics:

- Concrete masonry unit (CMU) wall construction, with a minimum field sound transmission class (STC) of 44 or pre-fabricated acoustical panels having a minimum STC rating of 40,
- A metal roof structure having minimum field STC of 39,
- One acoustically-insulated personnel access door on the north wall, having minimum STC of 43,
- Up to 18”x18” of intake acoustical louver on the north wall,
- Up to 18”x18” of discharge acoustical louver on the south wall,
- Up to 100 square feet of the north wall assembly should be removable acoustical panels, with minimum STC rating of 40, and
- Interior equipment-facing surfaces of the walls and roof would feature 2”-thick acoustically-absorptive media on at least 50% of the available surface area—to reduce noise reverberation within the space.

This enclosure would ensure that noise levels would be in compliance with both the Seaside exterior and interior noise limits of 65 dBA CNEL (A-weighted decibels Community Noise Equivalent Level)and 45 dBA CNEL (per Seaside Municipal Code 17.30.060) for the nearest residences (See **Attachment 3, Hilby Avenue Pump Station Noise Technical Memorandum**). For these reasons, the proposed Hilby Avenue Pump Station would have a less than significant impact resulting from a permanent increase in ambient noise levels, and no mitigation is necessary.

e, f) No Impact: The proposed Hilby Avenue Pump Station site 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.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to the generation of noise. Because construction of the Pump Station would result in the same types of noise impacts as the ASR Project, the following previously approved mitigation measures must be implemented:

Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Construction Activities. (ASR EIR/EA)

The project applicant shall ensure that the construction contractor prohibit the use of all ancillary equipment (i.e., backhoe, truck, air compressor, and pump, etc.) during nighttime hours. Cleanup and other activities will occur only during daytime activities.

Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards. (ASR EIR/EA)

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

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

Mitigation Measure NZ-1c: Prepare a Noise Control Plan. (ASR EIR/EA)

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 plan shall also identify anticipated construction schedule, notification procedures, and contact information for noise related complaints. The noise control plan will be reviewed and approved by City of Seaside staff before any noise-generating construction activity begins.

13. Population and Housing

EXISTING SETTING

The proposed Hilby Avenue Pump Station 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. Based on Association of Monterey Bay Area Governments (AMBAG) projections, population is projected to increase in Seaside by approximately 3,095 people between 2010 and 2020. Based on the 2014 AMBAG Regional Housing Needs Allocation Plan, the total number of housing units which need to be planned in Seaside between 2014 and 2023 in order to meet Seaside's regional housing need allocation was 393 new units, including 95 very low income, 62 low income, 72 moderate income, and 164 above moderate income households.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, 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, Addendum No. 1 to the ASR EIR/EA, or the PWM/GWR EIR.

DISCUSSION

a, b, and c) No Impact. The proposed Hilby Avenue Pump Station would not induce population growth, or displace existing housing or people.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to population and housing and no mitigation is warranted.

14. Public Services

EXISTING SETTING

The proposed Hilby Avenue Pump Station would not impact public services, therefore a discussion of the existing setting is not included.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

No potential impacts to public services were identified in the ASR EIR/EA, Addendum No. 1 to the ASR EIR/EA, or the PWM/GWR EIR.

DISCUSSION

a) No Impact: Implementation of the proposed Hilby Avenue Pump Station would result in no new significant impacts resulting from new or altered governmental facilities, due to the fact that it is a component of a water conveyance system, and therefore would not increase the use of schools and parks, or increase the need for fire and police protection.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe impacts to public services and no mitigation is warranted.

15. Recreation

EXISTING SETTING

The proposed Hilby Avenue Pump Station would not impact recreational resources, therefore a discussion of the existing setting is not included.

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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, Addendum No. 1 to the ASR EIR/EA, or the PWM/GWR EIR.

DISCUSSION

a, b) No Impact: The proposed Hilby Avenue Pump Station would not result in significant new impacts because there would be no direct or indirect increased use of parks or recreational facilities due to the proposed Hilby Avenue Pump Station and no recreational facilities included in the proposed Hilby Avenue Pump Station.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe impacts to recreational resources and no mitigation is warranted.

16. Transportation and Traffic

EXISTING SETTING

The proposed Hilby Avenue Pump Station site is located on Luzern Street, near its intersection with Hilby Avenue in the City of Seaside. The surrounding area is residential with normally light traffic patterns. The nearest major street is General Jim Moore Boulevard located four blocks to the east. The closest highways that would potentially be used for materials transport and by construction workers in transit to the project site are Highway 1 (about 2 miles to the west), Highway 218 (about one mile to the south), and Highway 68 (about 2 miles to the south).

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

The ASR EIR/EA found the ASR Project would have the following less than significant impacts to traffic and circulation:

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

No mitigation measures were required. Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts related to traffic and transportation.

The PWM/GWR EIR concluded that there would be a less than significant impact due to construction-related traffic delays, safety, and access limitations, resulting from construction of the Product Water Pipeline and the Monterey Pipeline. This impact can be reduced to less than significant levels with the implementation of Mitigation Measure TR-2: Traffic Control and Safety Assurance Plan. The document also found that there would be significant impacts resulting from construction-related roadway deterioration and parking interference and that these impacts could be reduced to a less than significant level with the implementation of Mitigation Measure TR-3: Roadway Rehabilitation Program and Mitigation Measure TR-4: Construction Parking Requirements, respectively.

DISCUSSION

a, b) Less than Significant: The proposed Hilby Avenue Pump Station would result in temporary increases in traffic during construction. There would be a maximum of up to eight truck trips for material transport per day (four AM trips and four PM trips). Construction worker traffic will result from the estimated six workers on-site during the day which could result in up to twelve vehicle trips per day from workers (six AM trips and six 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 and maintenance of the Hilby Avenue Pump Station would not require additional employee vehicle trips, as there are existing CalAm facilities adjacent to the site that require routine maintenance. For these reasons, the proposed Hilby Avenue Pump Station would not cause any new significant impacts beyond those identified in the ASR EIR/EA and the PWM/GWR EIR and would not increase the severity of any significant impacts.

c, d, e, f, g) No Impact: Implementation of the proposed Hilby Avenue Pump Station would not impact air traffic operations because the nearest airports are over 2 miles away. The proposed Hilby Avenue Pump Station does not involve any construction within existing roadway travel lanes, bike lanes or near any transit stops, and would not increase hazards based on a design feature or result in emergency access concerns. Access to the proposed Hilby Avenue Pump Station site will be provided from Luzern Street and most parking areas would be accommodated on the proposed Hilby Avenue Pump Station site; therefore, there would be no significant parking or access impacts. In addition, CalAm will coordinate with residents within proximity of the site to ensure parking impacts are minimized.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts related to traffic and transportation. The Pump Station also will not contribute to significant impacts related to traffic and transportation identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

17. Utilities and Service Systems

EXISTING SETTING

The Monterey Regional Waste Management District manages the Monterey Peninsula's (including the proposed Hilby Avenue Pump Station 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 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) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

SUMMARY OF IMPACTS IN PREVIOUS DOCUMENTS

The ASR 1 EIR/EA identified a significant impact based upon temporary disruption of existing underground utilities during construction activities and identified that potential impacts would be reduced to a less than significant level through the implementation of Mitigation Measures PS-2 and PS-3. Addendum No. 1 to the ASR EIR/EA did not identify any significant impacts to utilities and service systems.

The PWM/GWR EIR found that there would be a significant impact related to utilities and service systems due to conflict with solid waste policies and regulations. This impact would be reduced to less

than significant level with the implementation of Mitigation Measure PS-3: Construction Waste Reduction and Recycling Plan.

DISCUSSION

a, b, c, e) No Impact: No wastewater would be generated as a result of the proposed Hilby Avenue Pump Station. The proposed Hilby Avenue Pump Station would be part of a water conveyance facility. The proposed Pump Station would be connected to the Monterey Pipeline by a short water connection pipeline (700 feet, 24" diameter). This pipeline would be routed along Luzern Street before turning onto the existing Hilby storage tank site. The proposed Hilby Avenue Pump Station would not result in any new significant impacts or increased severity of previously identified significant impacts from the ASR EIR/EA and PWM/GWR EIR.

d) No Impact: The proposed Hilby Avenue Pump Station would not require additional water rights or entitlements. The Pump Station would enable MPWMD and CalAm to fully exercise their existing water rights to divert excess flows from the Carmel River for injection into the ASR wells during wet weather periods. MPWMD and CalAm would be required to comply with all applicable permit conditions.

f, g) Less than Significant: The proposed Hilby Avenue Pump Station would result in a less than significant impact in terms of solid waste generation consistent with the analysis in the ASR EIR/EA and PWM/GWR EIR. The proposed Hilby Avenue Pump Station would not result in any new significant impacts nor would it increase the severity of impacts. Existing equipment on the site would be removed prior to construction. All equipment removed from the site would be recycled, ensuring consistency with the California Integrated Waste Management Act of 1989 and Monterey County mandates on waste generation.

The proposed Hilby Avenue Pump Station would not result in new or substantially more severe significant impacts to utilities and service systems. The Pump Station also will not contribute to significant impacts related to utilities identified in the ASR EIR/EA and PVM/GWR EIR; therefore no mitigation is warranted.

18. Mandatory Findings of Significance

CHECKLIST

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to 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, 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	☐	☒	☐	☐

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 NOx 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 an cumulatively considerable impacts related to implementation of that project.

The PWM/GWR EIR found that there would be less than significant cumulative impacts in all issue areas with the exception of PM10 emissions, marine surface waters, and marine biological resources. The cumulative significant impact resulting from PM_{10} emissions would be reduced to less than significant with the implementation of Mitigation Measure AQ-1, described in **Section 3. Air Quality**. The cumulative significant impacts to marine resources would be reduced to less than significant with the implementation of Mitigation Measure HS-C/MR-C: Implement Measures to Avoid Exceedances over Water Quality Objectives at the Edge of the Zone of Initial Dilution.

DISCUSSION

a, b, c) Less than Significant: The Proposed Hilby Avenue Pump Station 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 Pump Station would primarily occur in connection with temporary construction-related effects. As described above, a cumulative analysis for the PWM/GWR Project was performed in the PWM/GWR EIR and a cumulative analysis for the ASR Project was performed in the ASR EIR/EA and Addendum No. 1 to the ASR EIR/EA. The cumulative analysis performed in the PWM/GWR EIR included the ASR Project (Phases 1 and 2). Construction and operation of the Pump Station 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 and the PWM/GWR EIR. The Proposed Hilby Avenue Pump Station would not result in new significant impacts or significant impacts that would be increased in severity beyond those identified in the ASR EIR/EA and the PWM/GWR EIR.

IV. REPORT PREPARATION AND REFERENCES

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ATTACHMENT 2

AIR QUALITY AND GHG CALCULATION SPREADSHEETS

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EXHIBIT 16-A

GHG OPERATIONAL EMISSIONS

Indirect Emissions from Net New Electricity Consumption (including new cogeneration capabilities enabled by source water carbon content)			
GHGs from Electricity Consumption			
GHG	**Emission Factor (lb/kWh)**	**Electricity Consumption kWhr**	**CO2e* (metric tons)**
CO2	0.32800	500,000	74.39
CH4	0.00003	500,000	0.14
N20	0.00001	500,000	0.43
		Total =	**75**

Notes: The emission factor for CO2 was obtained from PG&E, 2013. Emission factors for CH4 and N2O are from USEPA, 2012b.
Project baseline and proposed electricity consumption estimates provided by MRWPCA, October 2014.
*Global Warming Potential for CH4 = 21; GWP for N2O = 310 (CCAR, 2009).

California Climate Action Registry (CCAR), 2009. General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009. Tables C.3 and C.6.
Pacific Gas and Electric Company (PG&E), 2013. Greenhouse Gas Emission Factors Info Sheet **for the year 2017**, last revised April, 2013.
USEPA, 2012b. eGRID2012 Version 1.0 Year 2009 GHG Annual Output Emission Rates, 2012.

Project Mobile Sources

			Running Exhaust Emission Factor (pound/mile)			Total Emissions (Metric tons)				Fuel efficiency	Fuel use
On-road Sources	**Miles/trip**	**One way Trips per year**	**CO_2**	**CH_4**	**N2O**	**CO_2**	**CH_4**	**N2O**	**CO_2e**	**mpg**	**gal/year**
Light duty truck (gas)	10	0	0.79	9.96E-05	1.92E-04	0.00	0.00	0	0.00	15	-
Heavy duty truck	25	0	3.61	1.12E-05	1.06E-05	0.00	0.00	0	0.00	5	-
					Totals =	**0.00**	**0.00**	**0**	**0.00**		**-**

Notes: Emission factors for mobile sources were derived from EMFAC2011 for the year 2018 (see CalEEMod Emfac 2011 Onroad Emission Factors). It is assumed that 1 employees would each generate two light duty truck trips each per day (2 total one way); 7 days per week (365 days per year), and that there would be 1 weekly heavy duty truck deliveries every two weeks (52 weeks per year).

Total GHG operational emissions (metric tons per year of CO2e) =	**75**
Construction emissions amortized for 30 year life (metric tons per year of CO2e) =	**2**
Total GHG emissions (metric tons per year of CO2e) =	**77**

EXHIBIT 16-A

CONSTRUCTION EQUIPMENT EMISSIONS

Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Annual Hours	TOG	ROG	CO	NOX	SO2	PM10	PM2.5	CO2 (pounds)	CH4	CO2e of CO2 (MT total)	CO2e of CH4 (MT total)	Total CO2e	MT/yr CO2e (amortized for 30 year life)
	ASR Pump Station																		
1	Pavers	160	0.42	8	3	24	1.8	1.5	10.9	17.3	0.0	0.9	0.8	1799.4	0.5				
1	Rollers	90	0.38	8	5	40	2.3	1.9	11.3	17.5	0.0	1.3	1.2	1531.3	0.5				
1	Loader	90	0.37	8	20	160	7.5	6.3	44.7	60.3	0.1	4.6	4.3	6001.0	1.8				
1	Backhoe	150	0.37	8	15	120	9.4	7.9	55.9	75.4	0.1	5.8	5.3	7501.2	2.3				
1	Cranes	200	0.29	8	30	240	22.7	19.1	79.2	226.3	0.2	10.3	9.4	15549.8	4.7				
1	Graders	200	0.41	8	3	24	4.2	3.5	17.0	35.8	0.0	2.0	1.8	2237.3	0.7				
1	Generator	200	0.74	8	60	480	1852.7	91.2	542.8	690.1	0.9	48.4	48.4	88925.0	8.1				
							Sum=	**131.5**	**761.9**	**1122.7**		**73.2**	**71.2**	**123545.1**	**18.6**	**56.04**	**0.18**	**56.22**	**1.87**
							Per Day =	0.5	3.0	4.5		0.3	0.3						

Notes: Construction would last approximately 7 months.

ATTACHMENT 3

HILBY PUMP STATION NOISE TECHNICAL MEMORANDUM

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EXHIBIT 16-A

AECOM
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Memorandum

To	John Chamberlain (AECOM – San Jose)	Page	1 of 7
CC	Stephanie Osby (AECOM – San Jose)		
Subject	Hilby Pump Station (Project No. 60489016) Noise Technical Memorandum		
From	Mark Storm, INCE Bd. Cert. (AECOM – San Diego)		
Date	May 17, 2016		

John,

At the request of California American Water (CAW), the AECOM Acoustics & Noise Control Practice has conducted a predictive analysis of noise emission associated with the proposed operation of three (3) adjacent 200-horsepower (hp) vertical pumps. The pumps would be installed at a prospective pump station on an existing CAW-owned water infrastructure property set within a residential neighborhood in the city of Seaside, CA. The analysis considers three options for sound abatement and compares the results with applicable local noise regulations and standards. (If needed, please refer to the "Acoustical Fundamentals" section starting on page 5 for a review of terminology used in this noise assessment.)

Introduction

Figure 1 depicts an isometric view of the proposed Project site in the community of Seaside, CA, with a conceptual pump station enclosure and added vegetative/landscaping visual cover on the intended site location. Based on information received to date, it is assumed the enclosure would feature the following:

- **Physical Dimensions** – 47'-4" long, 26'-2" wide, and 10 feet high.
- **Contained Equipment** –
  - The pump station will house up to three (3) 200-hp vertical pumps and their motors, along with any controls and ancillary equipment and components. Up to all three of the pumps may operate at any one time. Each pump produces 85 dBA sound pressure level (L_p) at 3 feet.
  - Exhaust fan rated for approximately 1,200 cubic feet per minute (cfm) and 1.25 inches water gauge (iwg) static pressure, to allow six air changes per hour. Fan L_p < 80 dBA at 3 feet, installed upstream of the building's discharge louver (see below).
  - Controls, etc. within building < 70 dBA L_p at 3 feet.
- **Structure** –
  - Concrete masonry unit (CMU) wall construction, with minimum field sound transmission class (STC) of 44. Alternately, substitute CMU with pre-fabricated acoustical panels (AP, e.g., IAC Acoustics NoiseLock, Commercial Acoustics or other comparable product) having a minimum STC rating of 40.
  - Metal roof structure having minimum field STC of 39.
  - One acoustically-insulated personnel access door (e.g., 84"x30") on the north wall, having minimum STC of 43.

- Up to 18”x18” (2.25 square feet) of intake acoustical louver (Commercial Acoustics MFLA-4-36 or comparable) on the north wall.
- Up to 18”x18” (2.25 square feet) of discharge acoustical louver (Commercial Acoustics MFLA-4-36 or comparable) on the south wall.
- Up to 100 square feet (e.g., 144” x 100”) of the north wall assembly should be removable acoustical panels, with minimum STC rating of 40.
- Interior equipment-facing surfaces of the walls and roof would feature 2”-thick acoustically-absorptive media (e.g., glass fiber or mineral fiber batt insulation) on at least 50% of the available surface area—to reduce noise reverberation within the space.

Figure 1. Aerial view of Project vicinity and proposed conceptual pump station enclosure (not to scale)

- **Other** –
  - All piping externally connecting the pump station to the surrounding new or existing piping network are subsurface or otherwise externally lagged with sound insulating materials so that pipe emission noise is rendered insignificant.

Analysis

Accounting for factors such as geometric divergence (i.e., attenuation with increasing distance from a noise source), the surrounding terrain and its varying elevations, Table 1 presents predicted Project

noise levels (L_{eq} and CNEL) at the indicated receivers for three different cases: A – full enclosure, B – barrier (i.e., four-sided partial enclosure w/ open top), C – no sound abatement. Notes on the analysis are as follows:

- For the full enclosure case, the analysis assumes the major noise emission paths are between the indicated receiver position and the two nearest radiating enclosure walls (east and south for 1215 and 1205 Yosemite; west and south walls for 1225 Luzern St.)
- The barrier case assumes the barrier top edge is five feet higher than the height of the noise source(s), with barrier segment footprints matching those of the full enclosure walls.

Table 1. Predicted Project Operation Noise Levels per Sound Abatement Option

Receiver Location	Horizontal distance (feet) between receiver and pump station position	Predicted pump ops noise dBA L_{eq} (at exterior of receiver position)		Predicted pump ops noise dBA CNEL (at exterior / interior of receiver position)	
		CMU walls	AP walls	CMU walls	AP walls
Case A: *Full Enclosure*					
1215 Yosemite St.	50' from south wall; 30' from east wall	48	48	54 / 42	55 / 43
1205 Yosemite St.	80' from south wall; 85' from east wall	43	43	50 / 38	50 / 38
1225 Luzern St.	140' from south wall; 115' from west wall	37	37	44 / 32	44 / 32
Case B: *Barrier*					
1215 Yosemite St.	30' from east barrier	58		65 / 53	
1205 Yosemite St.	80' from south barrier	50		57 / 45	
1225 Luzern St.	115' from west barrier	50		57 / 45	
Case C: *No Sound Abatement*					
1215 Yosemite St.	55'	74		81 / 69	
1205 Yosemite St.	100'	69		76 / 64	
1225 Luzern St.	140'	64		71 / 59	

Notes:
CMU = concrete masonry unit; AP = acoustical panel; CNEL = community noise equivalent level

Assuming that the occupied structures of the nearest residential receivers studied in Table 1 might have windows open, and thus result in only a 12 dB exterior-to-interior noise reduction[1], the predicted noise levels in Table 1 suggest that only sound abatement case A (full enclosure, as described above) would keep operating pump noise emission compliant with both the Seaside exterior and interior noise limits of 65 dBA CNEL and 45 dBA CNEL (per Seaside Municipal Code 17.30.060 Table 3-2)[2] respectively for all three nearest studied community residential receivers. Usage of either CMU or AP for the full enclosure walls appears to have generally comparable influence on predicted results at the nearest receivers.

Should enclosure final design details be different than what has been assumed for purposes of this analysis, the predicted noise emission can be re-evaluated with modified input parameters to determine outcomes at the nearest residential receivers. Please do not hesitate to contact me with

[1] USEPA, 1978, Protective Noise Levels – Condensed Version of EPA Levels Document, EPA 550/9-79-100, November.
[2] http://www.ci.seaside.ca.us/Modules/ShowDocument.aspx?documentid=2566

any questions or comments you may have, or suggestions on how this noise assessment might better suit your needs.

Statement of Limitations

Background information on the Project has included data from third parties, which AECOM has used in preparing this technical memorandum. AECOM has relied on this information as furnished or discovered online, and is neither responsible for nor has confirmed the accuracy of this information. Portions of this document have been prepared based on certain key assumptions made by AECOM which substantially affect predictive analysis results and corresponding findings and/or recommendations. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. The predictive analyses of AECOM are conditioned upon several assumptions.

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Acoustical Fundamentals

Noise

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity and interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to typical environmental noise exposure levels is annoyance. The response of individuals to similar noise events is diverse and influenced by many factors including the type of noise, the perceived importance of the noise and its appropriateness in the setting, the time of day and the type of activity during which the noise occurs, and the sensitivity of the individual.

Sound

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and amplitude. Frequency describes the sound's pitch and is measured in cycles per second (Hertz), while amplitude describes the sound's pressure (loudness). Because the range of sound pressures that occur in the environment is so large, it is convenient to express these pressures on a logarithmic scale that compresses the wide range of pressures into a more useful range of numbers. The standard unit of sound pressure measurement is the decibel (dB).

Frequency, in Hertz (Hz), is a measure of how many times each second the crest of a sound pressure wave passes a fixed point. For example, when a drummer beats a drum, the skin of the drum vibrates a number of times per second. When the drum skin vibrates 100 times per second it generates a sound pressure wave that is oscillating at 100 Hz, and this pressure oscillation is perceived by the ear/brain as a tonal pitch of 100 Hz. Sound frequencies between 20 and 20,000 Hz are within the range of sensitivity of the average healthy human ear.

Sound level is expressed by reference to a specified national/international standard. This document refers to Sound Pressure Level (SPL or L_p), which is used to describe sound at a specified distance or specific receptor location. In expressing L_p on a logarithmic scale, sound pressure is compared to a reference value of 20 microPascals (µPa). SPL should not be confused with Sound Power Level (PWL or L_W), which is a measure of inherent acoustic power radiated by a source. SPL depends not only on the power of the source, but also on the distance from the source and on the acoustical characteristics of the space surrounding the source (absorption, reflection, etc.). This is analogous to lighting, where the bulb wattage is its power and does not vary with location or environmental conditions, but the bulb's apparent brightness varies with the viewer's distance to the bulb and the surroundings.

Sound Propagation

Outdoor sound levels decrease as the distance from the source increases. This is due to wave divergence, atmospheric absorption, and ground attenuation. Sound radiating from a source in a homogeneous and undisturbed medium travels in spherical waves. As the sound waves travel away from the source, the sound energy is dispersed over a greater area, decreasing the sound pressure of the wave at discrete locations. Spherical spreading of the sound wave reduces the noise level at a rate of 6 dB per doubling of distance from a point source.

Atmospheric absorption also influences the sound levels received by an observer and becomes important at distances greater than 1,000 feet. The degree of absorption varies depending on the frequency of the sound as well as the humidity and temperature of the air. For example, atmospheric

absorption is lowest (i.e., sound carries farther) at high humidity and high temperatures; and, higher frequencies are more readily absorbed than lower frequencies. The result is that over large distances, lower frequency sound can become dominant as higher frequency sound is more rapidly attenuated. Turbulence, gradients of wind and other atmospheric phenomena also play a significant role in determining the degree of attenuation. For example, certain meteorological conditions such as temperature inversions can refract sound waves towards receivers on the ground (i.e., rather than upwards into the atmosphere), resulting in higher noise levels than would result from simple spherical spreading.

A-weighting

Sound from a tuning fork contains a single frequency (a pure tone), but most sounds one hears in the environment do not consist of a single frequency but rather a broad band of many frequencies differing in sound level. Because of the broad range of audible frequencies, methods have been developed to quantify these values into a single number. The most common method used to quantify environmental sounds consists of evaluating all frequencies of a sound according to a weighting system that is reflective of human hearing. Human hearing is less sensitive at low frequencies and extremely high frequencies than at the mid-range frequencies. This process is termed "A"-weighting, and the resulting dB level is termed the "A weighted" decibel (dBA). "A" weighting is widely used in local noise ordinances and state and federal guidelines. In practice, the level of a noise source is conveniently measured using a sound level meter that includes a filter corresponding to the dBA curve. Unless specifically noted, the use of "A" weighting is usually assumed with respect to environmental sound and community noise even if the notation does not show the "A."

Perception of Sound

A sound level of 0 dBA is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Zero dBA is not the absence of sound energy but instead a reference level against which the amplitude of other sounds is compared. Normal speech has a sound level of approximately 60 dBA. The minimum change in the sound level of individual events that an average human ear can detect is about 1 to 2 dB. A 3- to 5-dB change is readily perceived. An increase or decrease in sound level of about 10 dB is usually perceived by the average person as a doubling (or halving) of the sound's loudness.

Combining Sound Levels

Because of the logarithmic nature of the dB unit, sound levels cannot be added or subtracted directly and are somewhat cumbersome to handle mathematically. However, some simple rules are useful in dealing with sound levels. First, if a sound's intensity is doubled, the sound level increases by 3 dB, regardless of the initial sound level. Thus, for example: 60 dB + 60 dB = 63 dB, and 80 dB + 80 dB = 83 dB. Remember however, that it requires about a 10 decibel increase to double the perceived loudness of a sound.

Common Noise Metrics

Although dBA may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most ambient environmental noise includes a mixture of noise from nearby and distant sources that creates an ebb and flow of sound, including some identifiable sources plus a relatively steady background noise in which no particular source is identifiable. A single descriptor called the equivalent sound level (L_{eq}) is used to describe sound that is constant or changing in level. L_{eq} is the energy-mean dBA during a measured time interval. It is the "equivalent" constant sound level that would have to be produced by a given constant source to equal

the acoustic energy contained in the fluctuating sound level measured during the interval. The interval can be any period of time, such as a single hour or even a multiple-hour period. For instance, the "daytime L_{eq}" is considered an L_{eq} value for the consecutive fifteen hours between 7 a.m. and 10 p.m., and the "nighttime L_{eq}" represents the energy-mean value for the other nine hours (10 p.m. to 7 a.m.). In addition to the energy-average level, it is often desirable to know the acoustic range of the noise source being measured. This is accomplished through the maximum (L_{max}) and minimum (L_{min}) indicators that represent the root-mean-square (RMS) maximum and minimum noise levels measured during the monitoring interval. The L_{min} value obtained for a particular monitoring location is often called the acoustic floor for that location.

Common Day-Night Noise Descriptors

The Day-Night Average Sound Level (L_{dn} or DNL) represents the average sound level for a 24-hour day and is calculated by adding a 10-dB penalty only to sound levels during the night period (10:00 p.m. to 7:00 a.m.). The L_{dn} is the descriptor of choice used by many federal, state, and local agencies throughout the United States to define acceptable land use compatibility with respect to noise. Because of the time-of-day penalties associated with the L_{dn} descriptor, the L_{dn} dBA value for a continuously operating sound source during a 24-hour period will be numerically greater than the dBA value of the 24-hour L_{eq}. Thus, for a continuously operating noise source producing a constant noise level operating for periods of 24 hours or more, the L_{dn} will be approximately 6 dB higher than the L_{eq} value.

The Community Noise Equivalent Level (CNEL) is another oft-used day-night sound level descriptor that is similar to L_{dn}, but its derivation classifies the 7 p.m. to 10 p.m. portion of daytime hours as "evening" and adds a 5 dBA increment to each. Hence, a CNEL value can be slightly higher than that of an L_{dn} that has been derived from the same set of hourly L_{eq}. However, due to the slight difference, L_{dn} and CNEL are often used interchangeably or considered functionally equivalent by many jurisdictions.

About the Author

Mr. Storm is an AECOM Senior Project Engineer and a Board Certified Member of the Institute of Noise Control Engineering (INCE), who has over 23 years of experience in the practice of mechanical systems noise control, architectural acoustics and environmental noise assessment and mitigation for a variety of industrial (power generation, natural gas transmission), commercial, residential, municipal and transportation projects across the U.S.

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ATTACHMENT 4

PHOTOGRAPHIC SIMULATIONS OF HILBY AVENUE PUMP STATION

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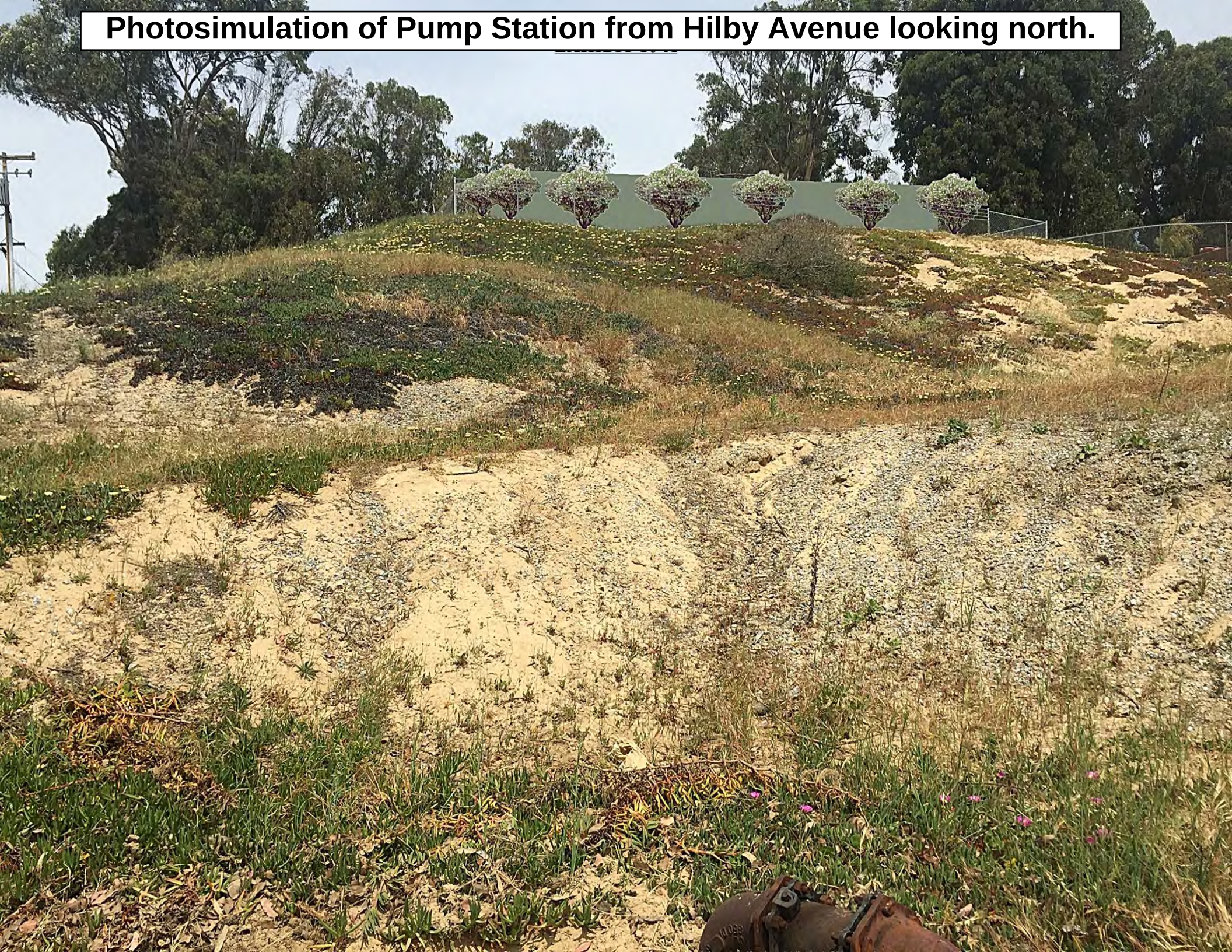
Photosimulation of Pump Station from Hilby Avenue looking north.



Photosimulation of Pump Station from Luzern Street looking east.