FINDING OF NO SIGNIFICANT IMPACT

For the

California American Water
Slant Test Well Project

October 2014

Prepared For:
Monterey Bay National Marine Sanctuary
99 Pacific Street, Bldg. 455A
Monterey, California 93940

Prepared By:
SWCA Environmental Consultants
1422 Monterey Street, C200
San Luis Obispo, CA 93401
This page intentionally left blank.
FINDING OF NO SIGNIFICANT IMPACT

for the California American Water Slant Test Well Project

Monterey Bay National Marine Sanctuary

The Council on Environmental Quality (CEQ) Regulations state that the determination of significance using an analysis of effects requires examination of both context and intensity, and lists ten criteria for intensity (40 CFR 1508.27). In addition, the National Oceanic and Atmospheric Administration Administrative Order (NAO) 216-6 Section 6.01b. 1-11 provides eleven criteria, the same ten as the CEQ Regulations and one additional, for determining whether the impacts of a proposed action are significant. Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others.

BACKGROUND

Monterey Bay National Marine Sanctuary (MBNMS) proposes to authorize two state agency permits or other approvals (the Proposed Action) that would allow development of a privately-proposed project that includes drilling into the submerged lands of MBNMS and a discharge of pumped, untreated sub-sea groundwater into the waters of MBNMS.

California American Water (Cal Am) has submitted a Request for Authorization to MBNMS (dated June 25, 2013), wherein Cal Am proposes development and operation of a short-term well pumping program within the dunes along the coastline of Marina, Monterey County, California (referred to as “Cal Am’s proposed project”). Cal Am’s proposed project would include drilling into the submerged lands and discharging into the waters of MBNMS, which are activities prohibited by the Office of National Marine Sanctuaries’ regulations (15 CFR Part 922) unless authorized by MBNMS. Therefore, MBNMS’s Proposed Action is the issuance of two separate authorizations: (1) authorization of a Coastal Development Permit issued by the California Coastal Commission to allow Cal Am’s proposed drilling into the submerged lands of MBNMS; and (2) authorization of a National Pollutant Discharge Elimination System (NPDES) permit or other approval issued by the Central Coast Regional Water Quality Control Board to allow Cal Am’s proposed discharge of water into MBNMS.

In accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.), an Environmental Assessment (EA) was prepared, titled “Final Environmental Assessment for the California American Water Slant Test Well Project – October 2014”. Cal Am’s proposed project is described in Section 2 of the Environmental Assessment prepared for the proposed action. The EA evaluated potential impacts of Cal Am’s proposed project (the preferred alternative) and the No Action Alternative. The EA focuses on the potential environmental effects on marine and terrestrial biological
resources, cultural resources, and hydrology, water supplies, and water quality as a result of Cal Am’s proposed drilling, pumping, and discharge activities.

1. **Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?**

The environmental effects of the proposed action, both adverse and beneficial, are not expected to be significant. Cal Am’s proposed project includes a short-term test pumping program to measure hydrogeologic and water quality conditions and reaction to pumping activities. There will be limited adverse short-term impacts associated with on-shore disturbance during construction and decommissioning activities. However, Cal Am has designed the proposed project to avoid sensitive areas and resources and MBNMS authorizations would require that the impacted areas be restored to original conditions upon project completion. Therefore, short-term impacts are not considered significant.

Significant adverse impacts are not expected from the proposed discharge into MBNMS. Discharged material would consist of untreated sub-sea groundwater subject to applicable NPDES or other state discharge permits and the California Ocean Plan water quality standards.

The project would benefit MBNMS and other interested stakeholders in the Salinas Valley Groundwater Basin by providing information and an increased understanding of hydrogeologic and water quality characteristics of the project area. However, no significant beneficial environmental effects are anticipated to result from the proposed pumping and testing activities.

2. **Can the proposed action reasonably be expected to significantly affect public health or safety?**

Public health and safety would not be substantially affected by the proposed action. Proposed on-shore drilling and construction activities would be located within a relatively remote sand mining facility that is largely inaccessible to the public. Low numbers of recreational users may access public areas of the beach seaward of mean high water in the vicinity of project activities; however, the mitigation measures identified in the EA will be incorporated within other-agency permits & approvals as well as 'by reference' in the MBNMS authorizations. They will require the presence of on-site construction monitors or protective safety barriers surrounding areas of excavation and construction to avoid any accidental vehicle or pedestrian traffic in construction areas. The proposed discharge of untreated groundwater via an existing ocean outfall pipe would not substantially change existing conditions or uses and would not have any effect on public health or safety because the groundwater to be discharged is heavily influenced by the sea and would meet all California Ocean Plan and Regional Water Quality Control Board discharge permit requirements.
3. **Can the proposed action reasonably be expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?**

MBNMS contains one of the most productive and diverse ecosystems on the west coast, including a wide array of invertebrates, fishes, and marine mammals. However, the proposed action would predominantly be conducted in on-shore areas within an active sand mining facility in the Marina coastal dune complex. Coastal dunes also provide high quality habitat value and lesser disturbed portions of the dunes adjacent to the project area are known to support several Federal and state listed species. MBNMS has consulted with U.S. Fish and Wildlife Service, NOAA Fisheries, and other state agencies in regard to these species.

The project would be limited to previously disturbed areas of the coastal dunes, and the EA identifies additional avoidance and minimization measures that will be incorporated within other-agency permits & approvals as well as 'by reference' in the MBNMS authorizations to ensure no significant effects on sensitive species and habitats occur. The proposed discharge of untreated sub-sea groundwater, consistent with requirements of the California Ocean Plan and NPDES or other state discharge permit, would not adversely affect marine resources. Although the geographic area has a high diversity of terrestrial and marine species, the impact on these species and their habitats is not expected to be significant.

The EA and supporting documentation identified the CEMEX sand mining plant as eligible for listing in the National Register of Historic Places. The proposed project would be sited to avoid all contributing resources and the short-term and limited nature of proposed activities would minimize any effects on the historic resource. Therefore, no effect on historic resources in the project vicinity is expected.

Several dredge and settling ponds associated with the onsite CEMEX sand mining operations were identified as potential wetlands based on the California Coastal Commission’s one parameter definition. However, the ponds do not support sensitive wetland species or habitat due to their mining use and the project would avoid these features. The project would not take place within park lands, prime farmlands, or wild and scenic rivers.

4. **Are the proposed action's effects on the quality of the human environment likely to be highly controversial?**

The effects on the human environment are not expected to be highly controversial. Groundwater rights and interests in the project area and larger Salinas Valley Groundwater Basin are highly contentious. However, as the attached EA demonstrates, effects on the human environment associated with the proposed action would be very minimal. There is existing disagreement within the Monterey Peninsula regarding how to best resolve groundwater issues and manage groundwater resources. The proposed action would not authorize any long-term or permanent use that may affect groundwater use or
water quality supplies in the area. Cal Am's proposed project is limited to short-term test pumping and water quality sampling activities. The project is intended to provide additional information relating to the hydrogeologic and water quality characteristics of the groundwater aquifers in the project area, which would generally benefit all stakeholders interested in the Salinas Valley Groundwater Basin.

MBNMS circulated the Draft EA for public review and comment for a 30-day period from June 25, 2014 to July 25, 2014. A total of three public comments were received in response, including comments from an interested agency in support of the project, comments from the agency that owns and manages the existing wastewater ocean outfall that would be used for the proposed discharge regarding engineering design requirements for connection and use of the outfall, and one public comment related to the potential release of sub-surface greenhouse gas emissions. The Final EA was revised as necessary to reflect this information and the comments and MBNMS responses and analysis are included as Appendix E of the EA.

Although the project area has a contentious history of groundwater rights and management issues, there is not expected to be substantial disagreement regarding the potential effects on the quality of the human environment that could occur as a result of the proposed action.

5. Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

The proposed action's effects on the human environment would not be highly uncertain or involve unique or unknown risks. Cal Am proposes to temporarily pump currently unusable (due to the extent of seawater intrusion) groundwater, measure hydrogeologic and water quality effects within surrounding areas of unusable seawater intruded aquifers, and discharge the pumped groundwater, untreated, into the ocean. Potential effects of the proposed discharge are not expected to be different than the historic discharges of treated wastewater via the existing outfall and the frequency of similar construction activities in the project vicinity and elsewhere.

No in-water disturbances or activities other than the discharge are proposed that could result in a substantial impact on marine species or habitats. Proposed on-shore construction activities would be limited in duration and extent and would occur within a heavily disturbed sand mining facility. Appropriate mitigation measures have been recommended to further reduce or eliminate the potential for impacts to sensitive species in adjacent dune areas, including biological surveys, monitoring, and avoidance requirements. The mitigation measures will be incorporated within other-agency permits & approvals as well as 'by reference' in MBNMS's authorizations and would be conditioned on incorporation of these measures. Therefore, due to the limited nature of the proposed project activities, and the existing disturbed nature of the project site, none of the proposed action's effects are likely to be highly controversial.
6. **Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?**

The proposed action would not set a precedent for future actions with significant effects and would not represent a decision in principle about any future considerations. The proposed action is limited to the short-term test pumping activities currently proposed by Cal Am. Any future authorization applied for under 15 CFR Part 922 will be considered separately and must contain information to support the findings required in MBNMS implementing regulations. Any potential future proposals for permanent sub-surface or open ocean intakes and/or desalination projects would be subject to separate and complete NEPA review. Subsequent permit applications will be considered individually on a case-by-case basis and with consideration to overall cumulative impacts.

7. **Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?**

The proposed action is not expected to have significant impacts either at the individual or cumulative level due to the limited nature of proposed project activities and the appropriate siting of the project in previously disturbed on-shore areas above seawater intruded groundwater zones. The evaluation of potential cumulative impacts in the EA considered incremental increases in groundwater pumping activities in the project vicinity, dune habitat disturbance, and development within an eligible historic district. However, the impacts of the proposed action were found not to be cumulatively significant due to the limited areas of disturbance and short-term nature of project activities. The separation in timing of pumping activities associated with the proposed slant test well and any future desalination project (which would not be operated for several years after completion of the test pumping) would prevent any potential compounding of groundwater impacts.

Project-related impacts of the proposed slant test well project would be short-term, and predominantly limited to the area of direct disturbance and immediate vicinity (i.e., no significant impacts to area-wide air quality, water resources, or regional transportation facilities have been identified). The project’s limited impacts would be minimized or eliminated through application of standard avoidance, minimization, and mitigation measures and no significant individual or cumulatively significant impacts would occur.

8. **Can the proposed action reasonably be expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or historical resources?**

The proposed action would not adversely affect any entity listed in or eligible for listing in the National Register of Historic Places or result in the loss or destruction of any significant scientific, cultural, or historic resources. MBNMS prepared a Cultural Resources Survey Report and completed Section 106 consultation with the Office of Historic Preservation as part of its project evaluation. The Cultural Resources Survey
Report identified one historic district with seven contributing structures in the project vicinity. Avoidance measures were identified to ensure project activities would not affect potential structures within the district. The Office of Historic Preservation concurred with the findings of the Report and concluded that a Finding of No Adverse Effect would be appropriate for the proposed action with implementation of the avoidance and mitigation measures identified in the Cultural Resources Survey Report and listed in the EA. Compliance with all recommended mitigation and avoidance measures would be required as a condition of other-agency permits & approvals as well as 'by reference' in the MBNMS authorizations.

9. **Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?**

The proposed action would not have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973.

The EA evaluates the affected environment and potential effects of the proposed project on endangered or threatened species, their critical habitat, marine mammals, and other non-target species. As described in the EA, the absence of in-water activities and disturbance significantly reduces any potential for adverse effects on marine species or habitat. Project activities in the marine environment would be limited to a proposed discharge of untreated sub-sea groundwater, which would be subject to standards of the California Ocean Plan and NPDES permit program or other state discharge permit requirements. Water quality testing conducted at the project site also indicates that groundwater at the project location is highly influenced by the sea and does not contain elevated levels of any regulated constituents. Therefore, no substantial damage to the ocean, coastal habitats, or essential fish habitat is expected as a result of the proposed discharge.

The potential for impacts to marine species or mammals on the beach or in the near-shore environment is also addressed in the EA, and impacts related to on-shore disturbance, including hydroacoustic effects of drilling activities, were found to be insignificant. On-shore disturbance activities are not substantially different from historic sand mining activities that have occurred at the site since 1906. Sound levels generated from construction and on-shore drilling are not anticipated to transfer to the aquatic environment, particularly at a level that would be distinguishable above ambient in-water background noise (i.e., the sound of waves, boats, etc.).

The project is proposed in an area known to support nesting western snowy plover and also encompasses areas of designated snowy plover critical habitat. Approximately 0.15 acre of critical habitat within the construction footprint would be directly disturbed as a result of excavation, trenching, and grading activities during construction and decommissioning of Cal Am's proposed project. However, no drilling is proposed in critical habitat and the proposed project is not expected to alter essential physical or biological features of the habitat to an extent that appreciably reduces the conservation value of critical habitat for snowy plover.
The project site includes occurrences or potential habitat to support various additional state or federally listed species, including the federally endangered Smith's blue butterfly, Monterey gilia, and Menzies' wallflower, and the federally threatened Monterey spineflower. However, due to project siting within a disturbed roadway within the sand mining facility, and avoidance, mitigation, and minimization measures identified in the EA, it was determined that the proposed project would not adversely affect these or other non-listed species or habitats. The U.S. Fish and Wildlife Service concurred through informal consultation under Section 7 of the Endangered Species Act that the project may affect but is not likely to adversely affect species in the project area.

NOAA Fisheries was also consulted regarding the potential for adverse effects to the marine environment and essential fish habitat (EFH) and NOAA Fisheries expressed that they had no concerns related to fisheries and that an EFH assessment was not necessary.

10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?

The proposed action does not threaten a violation of any Federal, state, or local law or requirement imposed for the protection of the environment. All applicable Federal, state, and local laws and regulations were considered during preparation of the EA and an overview of compliance measures for each of these applicable laws and policies are discussed in the EA. The analysis in the EA and consultation efforts of MBNMS establish that the proposed activities would not violate the Endangered Species Act, Magnuson-Stevens Fisheries Conservation and Management Act, California Endangered Species Act, or provisions of the California Coastal Act and California State Lands Commission. Cal Am’s proposed project is also subject to permits or other approvals from the City of Marina, the California Coastal Commission, Central Coast Regional Water Quality Control Board, Monterey County Department of Environmental Health, Monterey Regional Water Pollution Control Agency, and California State Lands Commission. Each additional permitting agency will review the proposed project for consistency with applicable laws and regulations.

11. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

With implementation of required mitigation measures, the proposed action is not expected to result in the introduction or spread of any non-indigenous species. The proposed project would not involve any in-water activity outside of the direct discharge of untreated pumped water into MBNMS via the existing ocean outfall pipe. Therefore, the potential for introduction of invasive species into the marine environment would be very low. Cal Am’s proposed project could result in the spread or introduction of non-native species, including invasive exotic plant species, within the coastal dunes via transport by construction equipment or operational vehicles or use of imported fill material (if necessary) at the time of project construction or decommissioning. Measures would be implemented during construction and decommissioning activities to minimize the risk of spread of invasive species, including removal and disposal of exotic invasive
species within areas of disturbance, development of an invasive species control program, use of imported fill (if necessary) from a source known to be free from invasive species, and habitat restoration, revegetation, and monitoring to ensure successful establishment of native dune species in disturbed areas.

**DETERMINATION STATEMENT**

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for the California American Water Slant Test Well Project, and supporting Appendices, it is hereby determined that the California American Water Slant Test Well Project and proposed action will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement (EIS) for this action is not necessary.

[Signature]

Daniel J. Basta, Director
Office of National Marine Sanctuaries

[Date]

Monterey Bay National Marine Sanctuary
Cal Am Slant Test Well Project
Finding of No Significant Impact

October 2014