

**Final Environmental Impact
Report/Environmental Assessment for
the Monterey Peninsula Water
Management District Phase 1 Aquifer
Storage and Recovery Project**

State Clearinghouse #2004121065

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Acronyms and Abbreviations

AAQS	ambient air quality standards
AF	acre-feet
AFD	acre-feet per day
AFY	acre-feet per year
ASR	Aquifer Storage and Recovery
BMP	best management practice
BO	Biological Opinion
Cal-Am	California American Water
CDR	Conceptual Design Report
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CO	carbon monoxide
CPUC	California Public Utilities Commission
CDFG	California Department of Fish and Game
CVSIM	Carmel Valley Simulation Model
CWP	Coastal Water Project
DEIR	Draft EIR
EA	Environmental Assessment
EIR	environmental impact report
GPM	gallons per minute
HTRW	Hazardous, Toxic and Radioactive Waste
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MEC	Munitions and Explosives of Concern
mgd	million gallons per day
MMP	Mitigation Monitoring Plan
MOA	Memorandum of Agreement
MPWMD or the District	Monterey Peninsula Water Management District
MPWRS	Monterey Peninsula Water Resources System
MR RI/FS	Munitions Response Remedial Investigation/Feasibility Study
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act

NOAA Fisheries or NMFS	National Marine Fisheries Service
NCCAB	North Central Coast Air Basin
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRMA	Natural Resources Management Area
PEA	Proponent's Environmental Assessment
PM10	particulate matter less than or equal to 10 microns in diameter
Proposed Project	Construction and operation of an aquifer storage and recovery project
REL	reference exposure level
RM	River Mile
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SGB	Seaside Groundwater Basin
SMTIW	Santa Margarita Test Injection Well
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UXO	Unexploded ordnance

Chapter 1

Purpose and Format

Introduction

Under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), the lead agency for a proposed project is required to consult with and obtain comments from public agencies with legal jurisdiction concerning the proposed project and to provide the general public with opportunities to comment on the draft EIR/EA after completion of a draft environmental impact report (EIR)/environmental assessment (EA). The lead agency is also required to respond to significant environmental points raised during the review and consultation process.

This final EIR/EA addresses the Monterey Peninsula Water Management District's (MPWMD; also referred to as the District) proposal to construct and operate an aquifer storage and recovery (ASR) project that would allow diversion of a limited amount of flow from the Carmel River during high flow conditions for storage in, and later recovery from, the Seaside Groundwater Basin. The ASR project would divert up to 2,426 acre-feet (AF) per year from the Carmel River between December and May. This document also addresses the construction, operation, and removal effects of a temporary aboveground water supply pipeline being proposed by California American Water (Cal-Am) in the vicinity of the proposed new ASR well. The final EIR/EA contains the public and agency comments received during the state and federal agency and public review period on the draft EIR/EA, which was held from March 23 to May 8, 2006, with an extension to May 22, 2006. The MPWMD also held a public comment meeting on April 17, 2006. Responses to comments raised during this meeting are addressed in Chapter 3, "Comment Letters and Responses to Comments," of this document.

Copies of the draft EIR/EA and additional copies of this final EIR/EA are available for review at the Monterey Peninsula Water Management District, 5 Harris Court, Building G, Monterey, CA 93940. The draft EIR/EA is incorporated by reference into this final EIR/EA and will not be reprinted.

Organization

This final EIR/EA is organized as follows:

- Chapter 1, “Purpose and Format,” describes the purpose and organization of this final EIR/EA.
- Chapter 2, “Changes to the Draft EIR/EA,” includes changes to the draft EIR/EA initiated by the lead agencies (MPWMD and U.S. Army) and changes to the draft EIR/EA that are identified in responses to comments. Changes to the draft EIR/EA are identified by either a line through the text showing deleted text or underlining where new text has been inserted.
- Chapter 3, “Comment Letters and Responses,” contains the comment letters on the draft EIR/EA followed by responses to the comments. Each letter and each comment within a letter has been assigned a number. Responses are numbered to correspond to the appropriate comment.
- Chapter 4, “Revised Mitigation Monitoring Plan,” includes the changes to the draft Mitigation Monitoring Plan (MMP). Changes to the draft MMP are identified by either a line through the text showing deleted text or double underlining where new text has been inserted.
- Chapter 5, “References Cited,” lists the printed documents and individuals consulted during preparation of this final EIR/EA.
- Chapter 6, “Report Preparation,” contains a list of the individuals that assisted in the preparation of this final EIR/EA.

Chapter 2

Changes to the Draft EIR/EA

Introduction

This chapter presents changes to the draft EIR/EA that were either initiated by the MPWMD or the U.S. Army or that are explained in the responses to comments in Chapter 3. The changes are presented below in the order in which they appeared in the draft EIR/EA. When relevant, explanatory text is provided in italics.

Deletions are shown in strikeout text. Additions are underlined.

Acronyms

The following corrections are made to page xix of the draft EIR/EA in response to a comment from the Department of Toxic Substances Control. In addition, all subsequent occurrences of the phrase unexploded ordnance (or UXO) are hereby revised to munitions and explosives of concern (or MEC).

~~UXO~~ ~~Unexploded ordnance~~
MEC Munitions and explosives of concern

Executive Summary

Summary of Potential Environmental Impacts and Mitigation Measures for the Proposed Project

The following corrections are made to page ES-5 of the draft EIR/EA in response to a comment from the MBUAPCD.

Air Quality

Constructing the injection/extraction well and pipeline would result in short-term increases in PM10 and exposure of sensitive receptors to diesel particulate matter and acrolein. The impact on air quality resulting from the short-term increases in PM10 emissions was considered less-than-significant. The short-term impact of diesel particulate matter and acrolein emissions was also considered less than significant significant. The preferred project well site is sufficiently removed from sensitive receptors and the construction period is sufficiently short to avoid a significant increase in health risk, because of the close proximity of sensitive receptors to the construction site. ~~These impacts would be mitigated to a less-than-significant level by implementing emission-reducing construction practices.~~

The following corrections are made to page ES-8 of the draft EIR/EA in response to a comment from the MBUAPCD.

Noise

Constructing the injection/extraction well and pipeline would expose adjacent sensitive land uses to noise and vibration in excess of applicable standards. These potentially significant impacts would occur as a result of using heavy equipment at the construction site and the necessity to drill at 24-hours-per-day until the well is completed. Noise and vibration impacts could be reduced to a less than significant level by limiting the use of unnecessary equipment ancillary to the drilling rig to daylight hours and employing noise-reducing construction practices. Operating the injection/extraction well could result in a significant impact on adjacent noise-sensitive land uses. This impact would be reduced to a less than significant level by designing an enclosure that adequately attenuates noise to meet local standards.

The following corrections are made to Table ES-1 of the draft EIR/EA in response to comments from the MBUAPCD, National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries; formerly referred to as NMFS), and the Department of Toxic Substances Control.

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Air Quality	AQ-1: Short-Term Increase in PM10 Emissions from Well Drilling	Less than Significant	None required	Less than Significant
	AQ-2: Short-Term Increase in PM10 Emissions from Pipeline Construction	Less than Significant	None required	Less than Significant
	AQ-3: Short-Term Increase in PM10 Emissions from Building Construction	Less than Significant	None required	Less than Significant
	AQ-4: Exposure of Sensitive Receptors to Elevated Health Risks from Exposure to Diesel Particulate Matter from Construction Activities	Less than Significant	Mitigation Measure AQ 1. Use Newer, Cleaner Burning Engines. Mitigation Measure AQ 2. Limit Construction Duration.	Less than Significant
	AQ-5: Exposure of Sensitive Receptors to Elevated Health Risks from Exposure to Acrolein Emissions from Diesel Exhaust from Construction Activities	<u>Less than Significant</u> Significant	Mitigation Measure AQ 1. Use Newer, Cleaner Burning Engines. Mitigation Measure AQ 2. Limit Construction Duration.	Less than Significant
Vegetation and Wildlife	BIO-1: Removal of Maritime Chaparral	Less than significant	None required	Less than significant
	BIO-2: Disturbance of the Fort Ord NRMA	Significant	Mitigation Measure BIO-1: Minimize or Prevent Disturbance to Adjacent NRMA	Less than significant
	BIO-3: Destruction of Monterey Spineflower, Sandmat Manzanita, Eastwood’s Goldenbush, and Kellogg’s Horkelia	Less than significant	None required	Less than significant
	BIO-4: Potential Direct Mortality or Disturbance of California Horned Lizards and Potential Permanent and Temporary Loss of California Horned Lizard Habitat	Less than significant	None required	Less than significant

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
	BIO-5: Potential Direct Mortality or Disturbance of Black Legless Lizards and Potential Permanent and Temporary Loss of Black Legless Lizard Habitat	Significant	None required; mitigation is included in the Fort Ord Multispecies Habitat Management Plan	Less than significant
	BIO-6: Potential Direct Mortality or Disturbance of Monterey Dusky-Footed Woodrat and Potential Permanent and Temporary Loss of Monterey Dusky-Footed Woodrat Habitat	Significant	None required; mitigation is included in the Fort Ord Multispecies Habitat Management Plan	Less than significant
	BIO-7: Potential Direct Mortality or Disturbance of American Badger and Potential Permanent and Temporary Loss of American Badger Habitat	Less than significant	None required	Less than significant
	BIO-8: Potential Loss of Nest Trees and Disturbance or Mortality of Migratory Birds	Less than significant	Mitigation Measure BIO-4: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15).	Less than significant
Aquatic Resources	AR-1: <u>Improved Flows for Upstream Migration Change in Flows for Adult Steelhead Upstream Migration</u>	Beneficial	<u>Mitigation Measure AR-1: Conduct Annual Survey Below River Mile 5.5 and Monitor River Flow in January-June Period.</u>	Beneficial
			None required	
	AR-2: Change in Juvenile Steelhead Rearing Habitat	Beneficial	Mitigation Measure AR-5-2: Cooperate to help develop a Project to Maintain, Recover, or Increase Storage in Los Padres Reservoir and If Needed, Continue Funding Program to Rescue and Rear Isolated Juveniles	Beneficial
	AR-3: Improved Flows for Fall/Winter Downstream Migration	Beneficial	None required	Beneficial

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Cultural Resources	AR-4: Maintenance of Flows for Spring Emigration	Beneficial	None required	Beneficial
	AR-5: Changes in California Red-legged Frog Habitat Due to Changes in River Flows	Beneficial	None required	Beneficial
	AR-6: Changes in Habitat for Other Aquatic Species Due to Changes in River Flows	Beneficial	None required	Beneficial
	CR-1: Potential for Discovery of Buried Cultural Deposits and Human Remains during Construction of the Well and Pipelines	Significant	Mitigation Measure CR-1: Stop Work If Buried Cultural Deposits Are Encountered during Construction Activities. Mitigation Measure CR-2: Stop Work If Human Remains Are Encountered during Construction Activities.	Less than significant
Geology, Soils, and Seismicity	GS-1: Potential Short-Term Increase in Erosion Resulting from Project Construction	Less than significant	None required	Less than significant
	GS-2: Potential Structural Damage and Threat to Public Safety from Fault Displacement and Ground Shaking during a Seismic Event	Less than significant	None required	Less than significant
	GS-3: Potential Structural Damage and Threat to Public Safety from Earthquake-Induced Liquefaction and Lateral Spread	Less than significant	None required	Less than significant
	GS-4: Potential Rupture of Pipelines and Threat to Public Safety Caused by Expansive Soils and Pipeline Corrosion	Less than significant	None required	Less than significant
Surface and Groundwater Hydrology and Water Quality	GWH-1: Changes in Seaside Basin Groundwater Storage	Beneficial	None required	Beneficial
	GWH-2: Short-Term Changes in Seaside Basin Groundwater Quantity	Less than significant	None required	Less than significant

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
	GWH-3: Long-Term Changes in Seaside Basin Groundwater Levels	Beneficial	None required	Beneficial
	GWH-4: Changes in Seaside Basin Groundwater Levels in Overlying Units	Less than significant	None required	Less than significant
	GWH-5: Potential for Seaside Basin Hydrofracturing	Less than significant	None required	Less than significant
	GWH-6: Short-Term Change in Seaside Basin Groundwater Quality	Less than significant	Mitigation Measure GWH-1: Comply with Performance Standards in NPDES Permits	Less than significant
	GWH-7: Long-Term Change in Seaside Basin Groundwater Quality From Mixing Groundwater with Injected Water	Less than significant	Mitigation Measure GWH-2: Operate Project in Compliance with SWRCB and DHS Policies Mitigation Measure GWH-3: Modify Project Operations as Required by Results of Monitoring	Less than significant
	GWH-8: Changes in Seaside Basin Groundwater Quality Caused by ASR Well Operation Discharges	Less than significant	None required	Less than significant
	GWH-9: Changes in Seaside Basin Recovered Water Quality	Less than significant	None required	Less than significant
	GWH-10: Effects on Other Seaside Basin Groundwater Users	Beneficial	None required	Beneficial
	GWH-11: Changes in Carmel River Streamflow During High Flow Periods	Less than significant	Mitigation Measure GWH-4: Operate Project in Compliance with NOAA Fisheries Recommendations, and Reduce Unlawful Diversions	Less than significant
	GWH-12: Changes in Carmel Valley Alluvial Aquifer Storage During High Flow Periods	Beneficial	None required	Beneficial

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Land Use	GWH-13: Changes in Carmel River Streamflow During Low Flow Periods	Less than significant	Mitigation Measure GWH-4: Operate Project in Compliance with NOAA Fisheries Recommendations, and Reduce Unlawful Diversions	Less than significant
	GWH-14: Changes in Carmel Valley Alluvial Aquifer Storage During Low Flow Periods	Beneficial	None required	Beneficial
	LU-1: Disruption of Existing Land Uses or Neighborhoods during Construction of the Well Site	Less than significant	None required	Less than significant
	LU-2: Disruption of Existing Land Uses or Neighborhoods during Construction of the Santa Margarita Well Pipeline and New Well Pipeline	Less than significant	None required	Less than significant
	LU-3: Incompatibility with Existing Adjacent Land Uses from Operation of the Proposed Pipelines and Well	Less than significant	None required	Less than significant
LU-4: Potential Inconsistencies with Relevant Land Use Plans and Policies from Operation of the Proposed Well and Pipelines	Less than significant	None required	Less than significant	

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Noise	NZ-1: Exposure of Noise-Sensitive Land Uses to Construction Noise in Excess of Applicable Standards	Significant	Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During Nighttime Well Drilling Activities. Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet Nighttime Standards. Mitigation Measure NZ-1c: Prepare a Noise Control Plan. Mitigation Measure NZ-1d: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program.	Less than significant
	NZ-2: Exposure of Sensitive Land Uses to Construction-Related Vibration Levels in Excess of Applicable Standards	Significant	Mitigation Measure NZ-1a Mitigation Measure NZ-1b Mitigation Measure NZ-1c Mitigation Measure NZ-1d	Less than significant
	NZ-3: Exposure of Sensitive Land Uses to Operational Noise in Excess of City Standards	Significant	Mitigation Measure NZ-2: Design Pump Stations to Meet Local Noise Standards.	Less than significant
Hazardous Materials	HAZ-1: Exposure of Employees and Public to Hazardous Materials during Construction of a Well and Pipelines at the Former Fort Ord	Significant	Mitigation Measure HAZ-1: Implement MEC UXO Safety Precautions during Grading and Construction Activities at the Project Site.	Less than significant
	HAZ-2: Handling and Use of Hazardous Materials during construction within 0.25 Mile of a School	Less than significant	None required	Less than significant

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Public Services and Utilities	HAZ-3: Potential Creation of a Hazard to the Public and Environment from Routine Use of Hazardous Materials or Accidental Release of Hazardous Materials during Operation of the Well Site	Less than significant	None required	Less than significant
	HAZ-4: Handling of Hazardous Materials during operation within 0.25 Mile of a School	Less than significant	None required	Less than significant
	HAZ-5: Public Exposure to Contaminated Drinking Water	Less than significant	None required	Less than significant
	PS-1: Increase in Solid Waste Generation and Construction Debris during Construction of Well and Pipelines	Less than significant	None required	Less than significant
	PS-2: Temporary Disruption of Existing Underground Utilities and Utility Service during Construction of Well and Pipelines	Significant	Mitigation Measure PS-2: Coordinate Relocation and Interruptions of Service with Utility Providers during Construction Mitigation Measure PS-3: Protect All Existing Utilities Slated to Remain	Less than significant
Transportation and Circulation	PS-3: Increased Demand for Electricity from Operation of ASR Facilities	Less than significant	None required	Less than significant
	TR-1: Temporary Traffic Increase and Potential for Level of Service Degradation during Construction of Wells and Pipelines	Less than significant	None required	Less than significant
	TR-2: Potential Conflict with Fixed-Route Monterey-Salinas Transit Service during Construction of Wells and Pipelines	Less than significant	None required	Less than significant
	TR-3: Potential Pedestrian and Bicycle Hazards from Pathway and Bikeway Closures or Disruption during Construction of Well and Pipelines	Less than significant	None required	Less than significant

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
Visual Resources	TR-4: Potential for Increased Traffic and Level of Service Degradation from Operation and Maintenance of the Well Site	Less than significant	None required	Less than significant
	TR-5: Increased Parking Demand Attributable to Operations and Maintenance of the Well	Less than significant	None required	Less than significant
	VIS-1: Temporary Alteration of Scenic Views during Construction of Well and Pipelines	Less than significant	None required	Less than significant
	VIS-2: Degrade Existing Visual Character during Construction of Well and Pipelines	Less than significant	None required	Less than significant
	VIS-3: Creation of Light and Glare during Construction of Well and Pipelines	Less than significant	None required	Less than significant
	VIS-4: Alteration of Existing Visual Character at Well Site	Less than significant	None required	Less than significant
Cumulative Impacts	The Proposed Project could result in cumulative impacts on traffic and transportation	Less than significant	None required	Less than significant
	The Proposed Project could result in a considerable contribution to NOx and PM10 emissions when considered together with other projects that could be constructed in the same timeframe.	Significant	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	Less than significant

Issue Area	Potential Impact	Significance Determination without Mitigation	Mitigation	Significance Determination with Mitigation
	The Proposed Project could contribute considerably to construction noise and vibration, affecting sensitive receptors when considered together with other projects that could be constructed in the same timeframe in the same area and affecting the same sensitive noise receptors.	Significant	Mitigation Measure Cume-1	Less than significant
	Construction of the well and associated pipelines could result in the loss or disturbance to special-status plant and wildlife species or their habitat.	Less than significant	None required	Less than significant
	There would be a cumulative energy effect from the Proposed Project because operation of the new ASR well would require 10,000 kilowatt hours of electricity daily.	Less than significant	None required	Less than significant

Chapter 3, Air Quality

Existing Air Quality Conditions and Ambient Air Quality Standards

The following corrections are made to page 3-5 of the draft EIR/EA in response to a comment from the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

The State of California has designated the NCCAB as being ~~in moderate~~ nonattainment transitional for ozone. The California Clean Air Act states that an ozone nonattainment area becomes nonattainment transitional if the state AAQS are not exceeded more than three times at any monitoring station in the air basin. The NCCAB is designated nonattainment for PM10 and unclassified/attainment for CO.

The following corrections are made to page 3-6 of the draft EIR/EA in response to a comment from the MBUAPCD.

The existing air quality conditions in the project study area can be characterized by monitoring data collected in the region. PM10, CO, and ozone concentrations are the pollutants of greatest concentration in the MBUAPCD and, therefore, are the pollutants of most concern from the Proposed Project. Air quality monitoring data for the last 3 years are presented in Table 3-2. The closest monitoring stations in the vicinity of the Proposed Project ~~are~~is:

- ~~Monterey Silver Cloud Court (ozone)~~
- ~~Salinas High School (ozone, CO, and PM10)~~
- ~~Moss Landing Sandholt School (PM10)~~
- Salinas (ozone, CO, and PM10)

The following corrections are made to page 3-11 of the draft EIR/EA in response to a comment from the MBUAPCD.

The State CEQA Guidelines further state that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the determinations above. The MBUAPCD has specified significance thresholds within its CEQA Air Quality Guidelines (~~2002~~July 2004) to determine whether project-related air quality impacts need mitigation. Based on consultation with MBUAPCD staff (Brennan pers. comm.) and the MBUAPCD's CEQA air quality guidelines, Table 3-5 summarizes applicable thresholds that are used in the analysis of significant air quality impacts.

The following corrections are made to pages 3-14 and 3-15 of the draft EIR/EA in response to a comment from the MBUAPCD, and subsequent email and

telephone conversations with air pollution control district staff. The mitigation measures have been removed because they are only necessary to support construction at the alternative well site (adjacent to the Roger S. Fisk Middle School). These measures are not necessary to protect public health if the Proposed Project is approved by the MPWMD Board of Directors. The proposed well site is sufficiently removed from the school grounds to avoid adverse effects.

Emissions of diesel particulate matter have the potential to result in elevated health risks. The assessment of cancer risk is typically based on a 70-year exposure period. Construction activities are sporadic, transitory, and short-term in nature, and once construction activities cease, so too will emissions from construction. Conversation with MBUAPCD staff indicates that construction activities that occur for less than 1 year will generally not result in any adverse health impacts. As indicated in Table 3-4, construction activities are anticipated to occur for a period of 2 months. Because construction activities are less than 1 year in duration, this impact is considered **less than significant**. ~~However, to further reduce emissions of DPM and associated health risks, Mitigation Measures AQ-1 and/or AQ-2 are recommended.~~

~~Mitigation Measure AQ-1: Implement Emissions Control Technology Use Newer, Cleaner-Burning Engines.~~

~~The project applicant will provide a plan, for approval by the lead agency and AQMD, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction. Control measures available to achieve emissions reductions include, but are not limited to: 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 use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (e.g., diesel particulate matter filters and lean-NO_x or diesel oxidation catalysts) after-treatment products, and/or other options as they become available in all equipment, especially equipment that doesn't meet Tier II engine standards.~~

~~Mitigation Measure AQ-2: Limit Construction Duration.~~

~~To minimize potential exposure of students at the nearby Roger S. Fitch Middle School (Figure 2-3) to TACs associated with diesel exhaust from construction activities, construction activities should occur as much as possible when prevailing winds are away from the school, based on on-site meteorological monitoring data, and when students are away from the school site. The project applicant shall consult with the Monterey County Office of Education to establish a schedule indicating when school will be out of session and when students will not be present on school grounds. This schedule will be used to help determine when construction activities in the vicinity of the school may occur.~~

Impact AQ-5: Exposure of Sensitive Receptors to Elevated Health Risks from Exposure to Acrolein Emissions from Diesel Exhaust from Construction Activities

Construction equipment and the test well pump may be diesel and could therefore emit diesel exhaust. Acrolein is emitted as a product of diesel combustion, where the concentration in diesel exhaust is currently understood to be 0.0035 grams acrolein per gram of ROG emissions. An acute one-hour reference exposure level (REL) of 0.19 $\mu\text{g}/\text{m}^3$ has been determined. Since construction would occur at a substantial distance from the nearest sensitive receptor, acrolein emissions would not cause acute health risks. Consequently, this impact is considered to be less than significant. ~~Using methods developed by the MBUAPCD, a screening analysis conducted for project construction indicates that the hazard index for acrolein exposure may exceed 1 at nearby sensitive receptors at the two potential locations for the well sites. Consequently, this impact is considered significant. Implementation of Mitigation Measures AQ-1 and/or AQ-2 would reduce these impacts to a less-than-significant level.~~

~~**Mitigation Measure AQ-1: Use Newer, Cleaner-Burning Engines.**~~

~~**Mitigation Measure AQ-2: Limit Construction Duration.**~~

Mitigation: No mitigation is required.

Chapter 4, Vegetation and Wildlife

Impact Analysis

Impacts and Mitigation Measures

The following corrections are made to page 4-18 of the draft EIR/EA by the MPWMD to clarify the entity that serves as the local fire district for the property at the ASR Project location.

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

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

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

The following corrections are made to page 4-21 of the draft EIR/EA in response to a comment from the California Department of Fish and Game (CDFG). The numbering of Mitigation Measure BIO-4 has also been changed to Mitigation Measure BIO-2 due to a typographical error.

Mitigation Measure BIO-42: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15)

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

Chapter 5, Aquatic Resources

Impact Analysis

Impacts and Mitigation Measures

On page 5-21 of the draft EIR/EA, Impact AR-1 has been revised and Mitigation Measure AR-1 has been added in response to verbal and written comments from NOAA Fisheries.

**Impact AR-1: Reduced Flows for Adult Upstream Migration
Improved Flows for Upstream Mitigation**

Compared to existing No Project conditions, operation of the ASR Project would improve opportunities for upstream migration by slightly increasing the duration of attraction flows and lengthening the duration of the migration season. On average, the ~~Proposed~~ ASR Project would provide 38 days of attraction flows (the minimum flows, ranging from 75 cfs to 200 cfs depending on year type, that induce steelhead to enter the river from the ocean) and would provide at least two weeks (14 days) of attraction flows during the average dry, below-normal, and above-normal, ~~and wet years; and no difference in critically-dry years~~ (Figures 5-6 and 5-7). ~~Although the average number of attraction days and the duration is increased by only one day, I~~ In dry years the attraction days are increased by two days (Figure 5-6) and the duration of the migration season increases by three days (Figure 5-7). Although small, these differences are considered a significant beneficial impact because steelhead migrate over a short time period of three to six-weeks ~~long period~~ in dry years, so increases of a few days in years with naturally overwhelming constraints will increase the probability that a larger

portion of the potential run will successfully migrate and spawn in the upper river. For this reason, the overall impact on upstream migration is considered a small, but beneficial impact. Although mitigation is not required, the following mitigation would ensure that the lower Carmel River is adequately monitored.

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

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

On page 5-23 of the draft EIR/EA, Mitigation Measure AR-2 has been revised by the MPWMD to better clarify the role of the MPWMD and Cal-Am in the operation of Los Padres Dam and Reservoir.

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

To ensure the continued benefit of the Proposed Project to the Carmel River and dependent resources during future low-flow periods, MPWMD will encourage and work with Cal-Am, CDFG, and NMFS NOAA Fisheries to investigate and develop a project to improve summer flows and the quality of releases by maintaining, recovering, or increasing surface storage capacity in the existing Los Padres Reservoir. MPWMD will provide staff expertise and data, as requested but does not control the reservoir. Cal-Am, as owner and operator of Los Padres Dam and Reservoir, is responsible for maintenance of the dam and compliance with existing regulations including water right conditions. The MPWMD will request that Cal-Am develop an updated elevation-capacity curve

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

for Los Padres Reservoir that provides current estimates of the amount of storage capacity available at various elevations in the reservoir area.

In the meantime, MPWMD will continue operation and funding of ~~its the~~ program to rescue and rear juveniles ~~steelhead~~ that are ~~stranded isolated~~ downstream of the ~~USGS Robles del Rio~~ gaging station at ~~Robles del Rio (RM 14.4)~~. This program is part of the District's mitigation program that was adopted in 1990 when the MPWMD Board certified the MPWMD Water Allocation Program EIR. Without significant progress in ~~maintaining recovering~~ storage capacity ~~in Los Padres Reservoir, and obtaining an alternate source of water, this~~ the rescue program will be needed in most years, ~~especially as Los Padres Reservoir continues to fill with sediment and the ability to maintain flow releases continues to diminish.~~

Chapter 8, Surface and Groundwater Hydrology and Water Quality

Seaside Groundwater Basin

Impacts and Mitigation Measures

Impact GWH-1: Changes in Seaside Basin Groundwater Storage

The following paragraphs have been added to page 8-11 of the draft EIR/EA in order to clarify the impact discussion.

As indicated earlier, increased groundwater storage in the coastal area of the SGB would result in increased outflow to the offshore portions of the aquifers in the basin. For the 45-year period of analysis, simulated subsurface outflow from the coastal area with No Project would average 410 AF per year and range from 32 AF in Water Year 1991 to 830 AF in Water Year 1958. The median or typical subsurface outflow with No Project would be approximately 420 AF per year. With the Proposed Project and elevated water levels due to increased storage, simulated subsurface outflow would average 910 AF per year and range from 90 AF in Water Year 1991 to 1,960 AF in Water Year 1984. The median or typical subsurface outflow with the Proposed Project would be approximately 850 AF per year.

As indicated in the *Project Operations* section later in this chapter, a revised version of CVSIM3 (Version 6.4) was developed to address concerns expressed by commenters on the Draft EIR/EA. For the Final EIR/EA, two revisions were incorporated into the operations model. First, the logic was revised to require that the water diverted from the Carmel River by Cal-Am during the high-flow season for injection would be supplied by wells in the reach between San Clemente Dam and RM 5.5. This revision was made to ensure that the

operations were consistent with Condition 5 of SWRCB Order 95-10 that requires Cal-Am to satisfy the water demands of its customers by extracting water from its downstream wells to the maximum extent feasible. By moving the diversion point for water for injection from the reach below RM 5.5 to the reach above RM 5.5, less water would be available for injection because the bypass flow requirements in the reach above RM 5.5 are greater than the requirements in the reach below RM 5.5. Second, the logic was revised to include more explicit rules governing how and when the injected water in the Seaside Basin would be recovered. These “recovery” rules would be similar to the bypass flow requirements recommended by NMFS that govern how and when water can be diverted from the Carmel River for injection. The recovery rules were developed in cooperation with staff from CDFG and NMFS and were designed to provide assurance that the excess water diverted from the Carmel River by Cal-Am and injected into the Seaside Basin during the high-flow period would be used by Cal-Am to meet customer demand during the low-flow period rather than pumping from Carmel River sources. The recovery rules were developed to provide an explicit accounting procedure to track the water injected, stored, and recovered over time. The revised simulation results for the Phase 1 ASR Project were compared with the original simulation results and did not differ significantly.

Because of the revisions described above, the injected water would be recovered and used sooner than in the original simulations. By using the injected water sooner, less water would remain in storage in the Seaside Basin and less water would move offshore as subsurface outflow. Specifically, during wet years, simulated end-of-month usable storage in the coastal area of the SGB would be between 1,230 and 2,490 AF greater with the Proposed Project. During normal years, the increases in usable storage with the Proposed Project would range from 1,200 to 1,820 AF. During dry years, simulated storage would be between 970 and 1,570 AF greater with the Proposed Project. During critically dry years, simulated usable storage would be between 400 and 1,400 AF greater with the Proposed Project. As indicated in the Draft EIR/EA, the Proposed Project would have a **beneficial effect** on SGB storage

Based on the reduction in storage in the Seaside Basin with the revised logic, especially during normal and wet years, the simulated subsurface outflow offshore with the Proposed Project would be reduced. These “losses” would average 660 AFY and range from 110 AF in Water Year 1991 to 1,150 AF in Water Year 1984. The median or typical subsurface outflow with the Proposed Project would be approximately 700 AFY.

Mitigation: No mitigation is required.

The following changes have been added to page 8-20 of the draft EIR/EA in order to consistently identify the phrase Proposed Project with capital letters.

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

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

Carmel River Basin

Project Operations

The following paragraphs have been added to page 8-22 of the draft EIR/EA in order to clarify the text.

Other changes to CVSIM3 included a 139-acre increase in the amount of riparian areas and a 5-acre decrease in non-wooded areas between San Clemente Dam and the Carmel River Lagoon. The net affect of these changes in riparian and non-wooded areas was a 500 acre-foot increase in annual water use by riparian vegetation between San Clemente Dam and the Carmel River Lagoon, compared to previous simulations. This change in riparian area and associated evapotranspiration was calculated by District staff (Christensen 2003) based on 2001 orthoimagery from San Clemente Dam to the Carmel River Lagoon. Previous estimates of riparian area along the Carmel River were based on 1986 aerial photographs.

As discussed above in Impact GWH-1, a revised version of CVSIM3 (Version 6.4) was developed to address concerns expressed by commenters on the Draft EIR/EA. For the Final EIR/EA, two revisions were incorporated into the operations model. First, the logic was revised to require that the water diverted from the Carmel River by Cal-Am during the high-flow season for injection would be supplied by wells in the reach between San Clemente Dam and RM 5.5. By moving the diversion point for water for injection from the reach below RM 5.5 to the reach above RM 5.5, less water would be available for injection because the bypass flow requirements in the reach above RM 5.5 are greater than the requirements in the reach below RM 5.5. Second, the logic was revised to include more explicit rules governing how and when the injected water in the Seaside Basin would be recovered. The recovery rules were developed to provide assurance that the excess water diverted from the Carmel River by Cal-Am and injected into the Seaside Basin during the high-flow period would be used by Cal-Am to meet customer demand during the low-flow period rather than pumping from Carmel River sources. With the proposed recovery rules, the amount of water that can be recovered each year is tied to the amount of water that was injected during the current year (i.e., during the preceding injection season, and if necessary, injected water in storage from previous years).

The revised logic for the recovery operations was designed to provide an explicit accounting procedure to track the amount of water injected, stored, and recovered each year. The logic in the original simulation of the Proposed Project used an implicit method to quantify the increased yield from the Seaside Basin due to the

Proposed Project. This yield was calculated as the difference between the Cal-Am's total production from the coastal area of the Seaside Basin with and without the Proposed Project. For the Final EIR/EA, the logic for the Proposed Project was revised to use a more explicit method. In the revised simulation, the amount of water diverted for injection, the amount of water injected, the amount of water recovered, and the amount of injected water in storage in the Seaside Basin were tracked on a daily basis. In this regard, Cal-Am's production of non-ASR water (i.e., naturally occurring water) from the Seaside Basin was tracked separately from Cal-Am's production of ASR water (i.e., injected water) from the Seaside Basin. The recovery rules used in the revised simulation for the Proposed Project were specified so that the results (e.g., streamflow, groundwater storage, production, and months of rationing) from the original and revised simulation runs were the same or similar.

Operating Logic

The following corrections are made to page 8-23 of the draft EIR/EA in response to a comment from the Carmel River Steelhead Association.

This operating logic was chosen to facilitate comparisons between the No Project and Proposed Project simulation results. ~~Actual operations may differ depending on future project objectives.~~ In response to future hydrologic conditions, actual operations may vary in certain periods as determined by the interagency management group (i.e., MPWMD, Cal-Am, CDFG, and NMFS). For example, more water could be extracted from the SGB in April and May and less in October and November to provide increased flows for steelhead smolt emigration in the spring and less flow for juvenile rearing in the fall. ~~Similarly, more storage in the SGB could be held in reserve for municipal use during extended dry periods.~~ The magnitude and range of Cal-Am's production from the coastal area of the SGB due to operation of the ~~proposed~~ Proposed Project is explained further in the "Project Yield" section.

Project Yield

The following paragraphs have been added to page 8-26 of the draft EIR/EA in order to clarify the text.

Lastly, it should be noted that the incremental firm yield associated with the Proposed Project is part of Cal-Am's overall yield from the MPWRS. For both simulations, i.e., No-Project and Proposed Project, overall annual production from the MPWRS to serve Cal-Am's main system was set at a maximum of 15,285 AF. Therefore, any increase in Cal-Am's ability to reliably divert from the coastal area of the SGB due to the Proposed Project would result in a corresponding decrease in Cal-Am's need to continue to divert from the Carmel River alluvial aquifer. None of the increased yield from the SGB due to the Proposed Project will be provided to new connections or intensified existing uses.

As discussed above, a revised version of CVSIM3 (Version 6.4) was developed to address concerns expressed by commenters on the Draft EIR/EA. These revisions resulted in less water being available for diversion for injection and, as a consequence, less yield for the Proposed Project. Based on the revised simulation, the increased average yield from the coastal area of the Seaside Basin due to the Proposed Project would be 916 AFY. Annual injections during this period would average 918 AFY. During the six-month recovery season, approximately 100 to 120 AF per month would be recovered from the Seaside Basin and not diverted from the Carmel River by Cal-Am.

Impacts and Mitigation Measures

Impact GWH-11: Changes in Carmel River Streamflow During High Flow Periods

The following text is added to page 8-31 of the draft EIR/EA in order to clarify the discussion.

As discussed above, Cal-Am's ability to deliver water to and transmit water from the Proposed Project site is a limiting factor. As proposed, the temporary, above-ground pipeline that would connect the Proposed Project site with Cal-Am's existing distribution system at the east end of Hilby Avenue in Seaside would be limited to 3,000 gpm or 13.3 AF per day. This limit will constrain the amount of excess water in the Carmel River Basin that could be diverted for injection and storage in the coastal area of the SGB. Specifically, the average simulated amount of excess water in the Carmel River during the high-flow season that would be diverted for injection as part of the Proposed Project is 960 AF and would range from zero AF to 2,370 AF per year. The median or typical amount of excess flow that would be diverted for injection based on available transmission capacity during the high-flow season is 1,150 AF per year. During the high-flow season, monthly diversions for injection would average between 80 and 240 AF per month. The maximum monthly diversion for injection would be approximately 410 AF.

With the revised logic for the Final EIR/EA, the average simulated amount of excess water in the Carmel River Basin during the high-flow season that would be diverted for injection as part of the Proposed Project is 918 AF and would range from 0 to 2,348 AF per year. The median or typical amount of excess flow that could be diverted from the reach between San Clemente Dam and RM 5.5 for injection based on available transmission capacity is 950 AF per year. During the high-flow season, monthly diversions for injection would average between 80 and 220 AF per month. The maximum monthly diversion for injection would be approximately 410 AF.

Figures 8-20 through 8-31 show the monthly impact of the Proposed Project on Carmel River streamflow at the Narrows, Near Carmel, and Lagoon sites for four types of water year: wet, normal, dry, and critically-dry. Each figure also includes the estimated monthly unimpaired flows for site for reference.

The following corrections are made to page 8-33 of the draft EIR/EA in order to clarify the mitigation.

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

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

Chapter 10, Noise

Proposed Project

Construction Impacts

On page 10-11 of the draft EIR/EA, the text for Mitigation Measure NZ-1a is revised by the MPWMD to reflect the fact that 24-hour-per-day use of certain equipment is necessary to drill the ASR well. The text of the Mitigation Measure is changed to read as follows.

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

The project applicant shall ensure that the construction contractor prohibit the use of all ancillary and unnecessary equipment (i.e., backhoe, truck, air compressor, ~~and pump, etc.~~) during nighttime hours. The only equipment that will be allowed to operate during nighttime activities would be the drilling equipment and well construction equipment; cleanup and other activities will occur only during daytime activities.

Chapter 11, Hazards and Hazardous Materials

Impacts and Mitigation Measures

The following corrections are made to page 11-9 and 11-10 of the draft EIR/EA in response to a comment from the Department of Toxic Substances Control.

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

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

- All personnel accessing the proposed well site will be trained in MEC recognition. This safety training is provided by the Army at no cost to the trainee. Training may be scheduled by contacting Fort Ord BRAC Office, Lyle Shurtleff at 831-242-7919.
- If an item is discovered that is or could be MEC, it shall not be disturbed. The item shall be reported immediately to the Presidio of Monterey Police Department at 831-242-7851 so that appropriate U.S. military explosive ordnance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations at the expense of the Army.
- Ground disturbing activities, including perimeter fence installation, will be coordinated with U.S. Army Corps of Engineers (USACE) Unexploded Ordnance Safety Specialist so that appropriate construction-related precautions may be provided (Fisbeck pers. comm.). The USACE Pamphlet EP 75-1-2 entitled *Munitions and Explosives of Concern (MEC) Support During Hazardous, Toxic and Radioactive Waste (HTRW) and Construction Activities*, dated August 1, 2004, which can be found at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/ep75-1-2/toc.htm> shall be followed by the USACE Safety Specialist to determine the type of construction oversight that will be needed based on the type of construction activities to be performed.
- Construction activities at the project site are subject to Monterey County Code, Ordinance 5012, Subsection 1 dated 2005, Title 16 "Environment," Chapter 16.1 "Digging and Excavating on the Former Fort Ord," which can be found at <http://municipalcodes.lexisnexis.com/codes/montereyco>. This ordinance prohibits excavation, digging, development, or ground disturbance unless an excavation permit is obtained and the permit requirements are followed.

Chapter 17, Temporary Pipeline Analysis

Impacts and Mitigation Measures

On page 17-6 of the draft EIR/EA, the numbering of Mitigation Measure WLD-1 has been revised due to a typographical error.

Mitigation Measure WLD-12: Remove Trees and Shrubs during the Nonbreeding Season for Most Birds (September 1 To February 15)

The following corrections have been made on pages 17-10 and 17-11 regarding the requirement for Mitigation Measures AQ-1 and AQ-2. The reasons for removal are similar to those identified above for the air quality analysis in Chapter 3, "Air Quality." The temporary pipeline construction will be sufficiently brief, dispersed, and at a distance from sensitive receptors to avoid an elevated health risk.

Impact AQ-2: Exposure of Sensitive Receptors to Elevated Health Risks from Exposure to Diesel Particulate Matter from Construction Activities

Emissions of diesel particulate matter have the potential to result in elevated health risks. The assessment of cancer risk is typically based on a 70-year exposure period. Construction activities are sporadic, transitory, and short-term in nature, and once construction activities cease, so too will emissions from construction. Conversation with MBUAPCD staff indicates that construction activities that occur for less than 1 year will generally not result in any adverse health impacts. Because construction activities would be up to 6 weeks in duration, this impact is considered **less than significant**. ~~However, to further reduce emissions of diesel PM and associated health risks, Mitigation Measures AQ-1 and AQ-2 are recommended (refer to Chapter 3).~~

~~**Mitigation:** See Mitigation Measures AQ-1 and AQ-2 in Chapter 3. No mitigation is required.~~

Impact AQ-3: Exposure of Sensitive Receptors to Elevated Health Risks from Exposure to Acrolein Emissions from Diesel Exhaust from Construction Activities

Construction equipment used for the pipeline may be diesel-powered and would therefore emit diesel exhaust. Acrolein is emitted as a product of diesel combustion, where the concentration in diesel exhaust is currently understood to be 0.0035 grams acrolein per gram of ROG emissions. An acute one-hour reference exposure level (REL) of 0.19 $\mu\text{g}/\text{m}^3$ has been estimated for acrolein. Since construction would occur at a substantial distance from the nearest sensitive receptor, acrolein emissions would not cause acute health risks. ~~Consequently, this impact is considered to be **less than significant**. Using methods developed by the MBUAPCD, a screening analysis conducted for project construction indicates that the hazard index for acrolein exposure may exceed 1 at nearby sensitive receptors. Consequently, this impact is considered **significant**. Implementation of Mitigation Measures AQ-1 through AQ-2 would reduce these impacts to a **less than significant level**.~~

~~**Mitigation Measure AQ-1: Use Newer, Cleaner-Burning Engines.**~~

~~**Mitigation Measure AQ-2: Limit Construction Duration.**~~

Mitigation: No mitigation is required.

Comment Letters and Responses to Comments

Introduction

This chapter documents the responses to public comments on the draft EIR/EA, including those received in writing and those made at the April 17, 2006, public hearing. Copies of the comment letters and comments received at the public hearing are presented in this chapter along with the MPWMD's responses to each comment.

Comments on the Draft EIR/EA

Table 1 lists the individuals and agencies that submitted written and verbal comments on the draft EIR/EA. The comments are divided into government/agency and individual comment letters and then presented alphabetically. Verbal comments presented at the MPWMD board meeting and public hearing on April 17, 2006, are summarized in Public Hearing Comments 12 and 13. The responses to each comment letter appear directly after each comment letter/summary. When comments resulted in changes to the draft EIR/EA, reference is made to the pages in the text of the draft EIR/EA where the changes were made. Changes to the draft EIR/EA are presented in Chapter 2 of this final EIR/EA.

Table 1. List of Individuals and Agencies Commenting on the Draft EIR/EA

Letter Number	Date of Comment Letter	Commenter
Government/Agency Comments		
Letter 1	May 8, 2006	California Coastal Commission
Letter 2	May 22, 2006	California Department of Fish and Game
Letter 3	May 4, 2006	Monterey Bay Unified Air Pollution Control District
Letter 4	May 8, 2006	Monterey County Department of Health
Letter 5	May 4, 2006	National Oceanic and Atmospheric Administration
Letter 6	May 22, 2006	National Oceanic and Atmospheric Administration
Letter 7	May 9, 2006	State Clearinghouse and Planning Unit
Non-Governmental Organization Comments		
Letter 8	May 8, 2006	California American Water
Letter 9	May 4, 2006	Carmel River Steelhead Association
Letter 10	April 17, 2006	Carmel Valley Association
Late Comment		
Letter 11	June 1, 2006	Department of Toxic Substances Control
Public Hearing Comments		
Public Hearing Comment 12	April 17, 2006	Robert Greenwood, Carmel Valley Association
Public Hearing Comment 13	April 17, 2006	John Fischer

STATE OF CALIFORNIA - THE RESOURCES AGENCY

Letter 1

ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
 725 FRONT STREET, SUITE 300
 SANTA CRUZ, CA 95060
 PHONE: (831) 427-4863
 FAX: (831) 427-4877

RECEIVED

MAY 15 2006

MPWMD



May 8, 2006

Henrietta Stern
 Monterey Peninsula Water Management District
 5 Harris Court, Building G
 Monterey, CA 93942-0085

Subject: Draft Aquifer Storage and Recovery Project EIR

Dear Henrietta:

Coastal Commission staff appreciates the opportunity to comment on the environmental evaluations of Monterey Peninsula Water Management District's (MPWMD) aquifer storage and recovery (ASR) project. This project proposes to extract water from the lower Carmel River during wet periods. The water would be transported to, and injected into, the Seaside Groundwater Basin where it (or its equivalent) later would be extracted for domestic use in the Cal-Am Water Company's service area. We have an interest in this project, because, although physical work will not occur within the coastal zone, the coastal zone could be affected in the following ways:

- the physical environment could be affected; for example, Carmel River lagoon;
- species that live in the coastal zone could be affected; for example, steelhead;
- water supply to users in the coastal zone could be affected; for example Cal-Am customers.

We welcome the clearly written, understandable, fairly detailed narrative of how the Carmel River functions (and has functioned and should function) with regard to the various lifecycle stages of steelhead. While we do not have time or expertise available to independently verify the narrative and its conclusions, we understand from reading them that there will be beneficial impacts on all phases of the steelhead's lifecycle. Assuming these conclusions are accurate, then we welcome such outcomes.

Within this background we offer the following comments on the draft environmental document:

1. Significance Criteria

We are somewhat concerned that the chosen significance criteria with respect to the steelhead habitat are changes from current conditions (i.e., comparison to the No Project Alternative). The current suboptimal conditions/ no project alternative are in large part due to water withdrawals from the Carmel River, that likely exceed the amount that water rights legally entitle Cal-Am to extract. This concern is mollified by two factors: that the conclusions of the impact analysis are that the project will improve conditions over this chosen baseline and that the document also includes a comparison of the project to "natural" conditions.

Stern MPWMD ASR storage project cmnts 5.2006.doc

1-1

1-2

**Stern, MPWMD
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Page 2**

2. Regulatory Authority

The document mentions (on page 5-13) some policies that the Coastal Commission follows, but does not indicate what is our regulatory authority. Because the proposed physical development is not in the coastal zone, we do not have direct regulatory authority over the ASR project. The draft document does not identify any project consequences or mitigation measures occurring in the coastal zone that would be defined as “development” under the Coastal Act and trigger coastal permit requirements. If in responding to comments, some such measures become identified (e.g., see our comment #3 below), then the Coastal Commission (and/or local governments implementing their certified local coastal programs) would have some regulatory authority.

1-3

To the extent that the project is federally funded, federally permitted, or on federal land, then we have potential review authority under the federal consistency provisions of the Coastal Zone Management Act. A portion of the project occurs on federal land at Fort Ord.

3. Carmel River Lagoon

The document predicts that in wet, above normal, and below normal water years, there will be a little less water in the Carmel River lagoon than if the project does not happen. The document further concludes that this will not result in an adverse impact on steelhead. However, the document does not explicitly discuss whether this is a potential adverse impact for other aspects or functions of the lagoon. If it were a potential adverse impact, then mitigation should be suggested. For example, we are aware that the Carmel Area Wastewater District has the ability (although not yet permitted by the Coastal Commission) to divert reclaimed wastewater to the lagoon. This could be a mitigation to ensure that water levels in the lagoon are not reduced.

1-4

4. Seaside Groundwater Basin

The document predicts, citing simulated studies, that there should be no impact on the Seaside Basin groundwater levels, either short-term or long-term. As recognized the basin is in an overdraft situation resulting in seawater intrusion. Because of the predictions, no adverse impacts are identified and no mitigation measures are proposed. We would suggest at a minimum that there be some on-going mitigation measure to ensure that the project is operated as proposed, that the groundwater situation is monitored, and that operation adjustments occur if necessary to correct unanticipated impacts.

1-5

5. Effects on Other Initiatives

It is our understanding that the ASR project does not change how much water Cal-Am takes, and is allowed under Order 95-10 to take, from the Carmel River. Nor is the project to change how much water overall (including using the Seaside Groundwater Basin) that Cal-Am produces and

1-6

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 Page 3

distributes and is allowed to. Rather, the project simply changes the timing of when water is taken from the Carmel River and then allows more overall water to be taken from the Seaside Groundwater Basin, because some of this water will be stored in, and hence augment, the Seaside Basin. Thus, it appears that this project will not directly affect other potential initiatives to both improve the water supply situation in the Cal-Am service area and improve the environment. There could be some effect if the ASR competes for funds or agency time to implement other such projects. There could also be some effect if water that is being diverted for this ASR project could alternatively be utilized in these other initiatives. Please either confirm that the proposed project would have no impact on the following potential initiatives or indicate what the impact would be on:

- initiatives to remove all or part of the San Clemente Dam;
- initiatives to reduce or eliminate breaching of Carmel River lagoon;
- initiatives to restore and enhance Carmel River lagoon and its environs;
- initiatives to further reduce water withdrawals from the Carmel River;
- initiatives to enhance and increase riparian vegetation along the Carmel River;
- water conservation initiatives;
- Sand City's approved desalination plant;
- Cal-Am's proposed desalination plant;
- initiatives to improve and expand wastewater reclamation;
- initiatives to construct other desalination plants or other new water supply projects;
- initiatives to reduce overpumping of, and replenish, the Seaside Groundwater Basin.

In conjunction with this last point, we understand that the Seaside Basin's water is being allocated by a watermaster through a court-mandated process. Since this ASR project will add water to the Seaside Basin, please indicate how it relates to this court-ordered process. We are concerned that the Seaside Basin has been found to be in an overdraft situation. While the court mandates a process for eventually eliminating the overdraft, it does not mandate a particular solution. It seems that all involved parties should be diligently working on such a solution. Please describe how the ASR project could serve as a factor in this regard.

6. Lagoon Breaching

On page 8-27 the document states that Monterey County Public Works Department bulldozes the mouth of Carmel River lagoon. Please note that this is not a permitted activity and has resulted in documented adverse impacts on steelhead.

7. Project Operation

Proposed Mitigation Measure GWH-4 (page 8-33) needs clarification. First, please clarify what are the "unlawful diversions from the Carmel River" to be addressed: diversions in excess of Order 95-10 limitations; diversions in excess of established water rights, diversions that do comply with NOAA Fisheries' "bypass Flow Recommendations? Second, what is meant by Cal-Am being "required to utilize water that is available from the Seaside Basin to help reduce

1-6
 cont.

1-7

1-8

Stern, MPWMD
ASR Project EIR/EA
May 8, 2006
Page 4

[these] unlawful diversions.” If this mitigation refers to how the project is operated in terms of when the extra injected water into the Basin is extracted, then such specific operational requirements should be spelled out. If this refers to existing water in the Seaside Basin, it would be difficult to implement because the Seaside Basin is already overdrafted and, hence, has no extra water to spare. What appears to be required and should be explicitly stated is that in addition to this ASR project Cal-Am needs to be promptly taking other measures that will result in reducing extractions from both the Seaside Basin and the Carmel River.

1-8
cont.

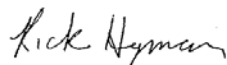
8. Sensitive Vegetation

We note that the proposed injection well site contains sensitive vegetation that would be adversely impacted by the project. We further note that Alternative 2 is for a site without such constraints, although it is characterized as having other limitations. Although the injection area is outside of the coastal zone, we would suggest that MPWMD find an injection well site that does not adversely impact sensitive vegetation.

1-9

We would appreciate being kept informed as to the status of this and related projects and are available to discuss our concerns with you.

Sincerely,



Rick Hyman
District Chief Planner

cc: OPR Clearinghouse (#2004121065)

Comment Letter 1—California Coastal Commission, May 8, 2006

Response to Comment 1-1

The comment is introductory. No response is required.

Response to Comment 1-2

No response is required.

Response to Comment 1-3

The commission is correct in stating it would have some regulatory authority over the Proposed Project if “development” in the coastal zone were part of the action. Following public review of the draft EIR/EA, MPWMD has concluded that the Proposed Project still will not include development in the coastal zone, and no action will be taken in response to comments that would constitute development in the coastal zone.

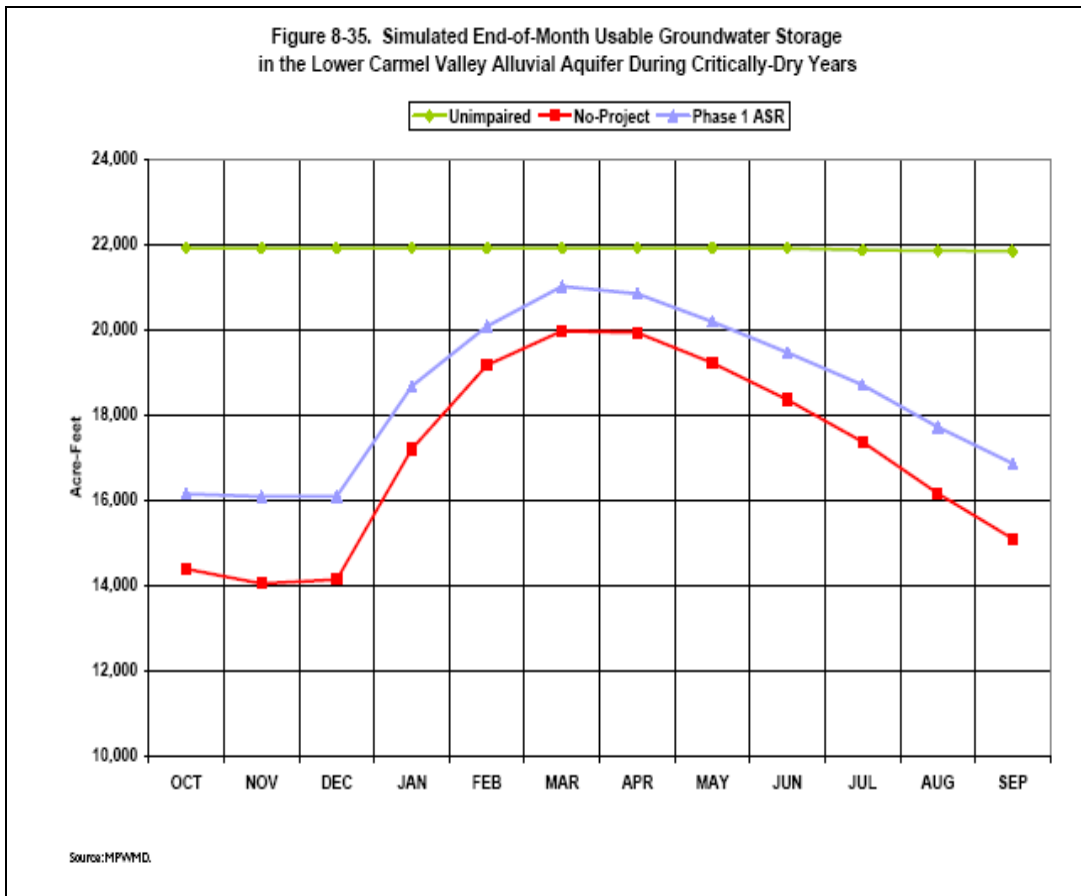
Response to Comment 1-4

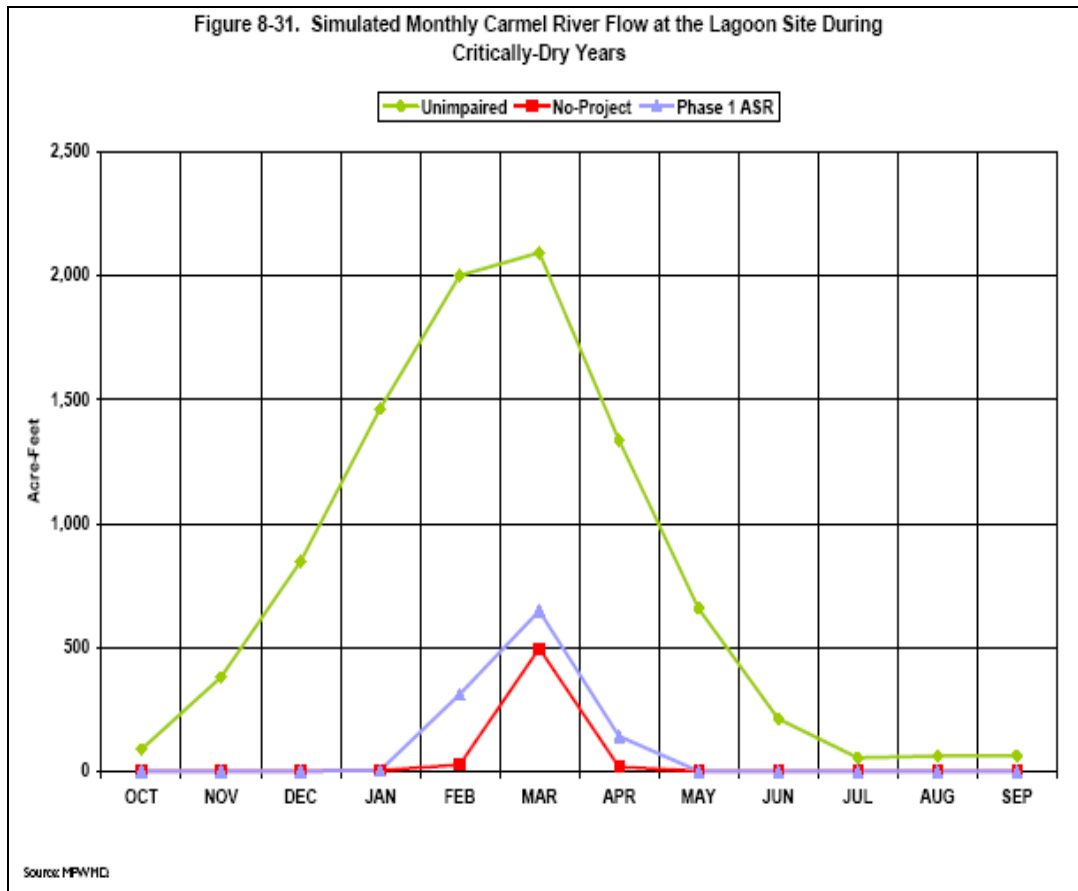
Although there will be less river flow to the lagoon during certain periods with the Phase 1 ASR Project, the inference that this lower inflow will result in less volume in the lagoon is questionable and likely erroneous. During winter periods, the amount of water in the lagoon is a function of the elevation of the river outlet at the sand beach barrier. This elevation, while influenced by inflow, responds to a complex interaction of tidal elevations, ocean swell, ocean wind waves, and sediment supply. The maximum difference in inflows with and without ASR diversions will be ± 6.7 cubic feet per second (cfs), which would result in a maximum 10% reduction in inflow when the streamflow is 67 cfs.¹ The percentage difference drops to approximately a 3% reduction when streamflow equals 200 cfs, which is generally recognized as the minimum inflow that keeps the lagoon mouth continuously open (James 2005). Thus, within the streamflow range of 67 to 207 cfs, the lower inflow associated with ASR diversions will somewhat hasten closure of the lagoon and result in more volume in the lagoon during the winter period, not less. Generally, the maintenance of a higher base elevation at the outlet channel has become a management goal of the responsible resource agencies and most recently was identified as a key component of future long-term management of the lagoon because water level is directly related to habitat volume and quality in the lagoon (California State Parks et al. 2006).

¹ With the proposed operation of ASR Phase 1, no diversions for injection can occur when the streamflow at Highway One drops below 60 cfs, per NOAA Fisheries Recommendations for Bypass Flows.

Higher inflows can compromise maintenance of a higher outlet elevation, so slightly lower inflows associated with the ASR Phase 1 Project should result in slightly longer periods of time with the lagoon stage (and hence volume) at higher levels and more aquatic habitat.

On a related subject, the ASR Phase 1 Project will result in higher groundwater elevations and storage in Carmel Valley Alluvial Aquifer Subunits 3 and 4. This beneficial impact extends throughout most of the year in dry and critically dry year types and results in higher inflow to the lagoon during periods when diversions for injection are turned off. For example, as documented in the following excerpted Figures 8-35 and 8-31 from the EIR/EA, in critically dry years the storage during February through May is approximately 1,000 AF greater with the Proposed Project and results in significantly greater monthly inflow to the lagoon during February, March, and April. During these drier periods, the ASR Phase 1 Project indirectly increases inflow to the lagoon, thereby increasing water levels and improving the quality of aquatic habitats in the lagoon.





Response to Comment 1-5

The purpose of the Proposed Project is to improve the condition of the Seaside Basin groundwater levels. The MPWMD regularly monitors the basin presently and will continue to do so once the well is installed.

Response to Comment 1-6

The commenter correctly notes that the Phase 1 ASR Project would not result in changes to Cal-Am’s Carmel River Basin diversion amounts allowed by State Water Resources Control Board (SWRCB) Order 95-10 or to the Cal-Am extractions allowed from the Seaside Basin by the Superior Court’s Final Decision and/or Seaside Basin Watermaster. The primary project purpose and environmental benefit of the Phase 1 Project is to help reduce dry season pumping effects on the Carmel River by maximizing use of the Seaside Basin instead. The Seaside Basin is able to be tapped due to injection of excess winter Carmel River flow into the Seaside Basin via the ASR Project. A secondary benefit of the Proposed Project is improved storage in the Seaside Basin as described in Chapter 8 of the draft EIR/EA.

The commenter asks if there would be an “impact” of the Phase 1 ASR Project on the initiatives listed in the table below and to describe the impact. By “impact,” the commenter appears to mean impact on the pursuit or implementation of these initiatives by MPWMD and other entities rather than a physical environmental effect. Although the question is beyond the scope of an EIR and is somewhat speculative, a response is provided below as a courtesy.

Initiative	Potential Effect of ASR
Remove all or part of San Clemente Dam.	No effect on current efforts.
Reduce/eliminate breaching of Carmel River lagoon.	No effect on current efforts.
Restore/enhance Carmel River lagoon and environs.	See Response to Comment 1-4. Beneficial effect to lagoon re: freshwater inflow and volume.
Reduce Carmel River water withdrawals.	Beneficial effect re: reduced dry season withdrawals by Cal-Am in most years.
Enhance Carmel River riparian vegetation.	No effect on restoration plans; indirect beneficial effect on water table/root zone.
Water conservation.	No effect on program.
City of Sand City desalination plant.	No effect on City efforts.
Cal-Am’s proposed desalination plant.	No effect on Cal-Am efforts for approvals for Coastal Water Project (CWP). Could result in possible refinement of ASR component of CWP.
Improve/expand wastewater reclamation.	No effect on current efforts.
Construct other desalination plants or other new water supply projects.	No effect on current efforts. Phase 1 ASR is viewed as complementary to nearly all projects.
Reduce overpumping; replenish Seaside Basin	ASR contributes to Court-identified physical solution to overdraft.

Regarding the Seaside Basin overdraft, the Superior Court’s Final Decision in March 2006 identified ASR as one potential physical solution for the involved parties and Watermaster to pursue. As noted above, the primary focus of the MPWMD Phase 1 ASR Project is to address Carmel River impacts, but some secondary benefits to the Seaside Basin would result. Future phases of the MPWMD ASR program, to be determined in coordination with Cal-Am, the Watermaster, and other entities, would have greater potential to address Seaside Basin issues.

Response to Comment 1-7

MPWMD thanks the California Coastal Commission for its input regarding the bulldozing activity by the Monterey County Public Works Department at the mouth of the Carmel River lagoon. MPWMD duly notes that this is not a permitted activity and has potential adverse impacts on steelhead. However,

because the bulldozing activity is not part of the Proposed Project, no change to the environmental document is required.

Response to Comment 1-8

The following paragraphs address clarifications requested by the commenter about Mitigation Measure GWH-4, “Operate Project in Compliance with NOAA Fisheries Recommendations and to Reduce Unlawful Diversions.” See also Response to Comment 6-3.

First, the “unlawful diversions from the Carmel River” that will be reduced as a result of the proposed ASR Phase 1 Project refer to surface and groundwater diversions from the Carmel River and underlying alluvial aquifer that Cal-Am is presently making in excess of its rights recognized by the SWRCB to meet customer demand. In this regard, SWRCB determined in Order 95-10 that Cal-Am had valid rights to divert up to 3,376 acre-feet per year (AFY) from the Carmel River system. Any diversions from the Carmel River system by Cal-Am in excess of this maximum without additional rights may be considered “unlawful.”² In Water Year 2005, Cal-Am diverted 10,675 AF from the Carmel River system for customer demand. Therefore, in Water Year 2005, Cal-Am’s unlawful diversions from the Carmel River totaled 7,299 AF. Under Order 95-10, Cal-Am is allowed to produce up to 11,285 AFY from the Carmel River to meet customer demand, without penalty. Under this limit, Cal-Am’s unlawful diversions from the Carmel River would be 7,909 AFY. In the DEIR, the unlawful diversions refer to “diversions in excess of Order 95-10 limitations” and “diversions in excess of established water rights.” The unlawful diversions do not refer to diversions from the Carmel River system made by Cal-Am for MPWMD’s proposed Phase 1 ASR Project that comply with the bypass flows recommended by NOAA Fisheries. The diversions from the Carmel River system for the Phase 1 ASR Project would be made under a separate water right that will be held jointly by Cal-Am and MPWMD. This new water right, which is being processed as a change to the water rights currently held by MPWMD for the New Los Padres Reservoir Project (SWRCB Permits 7130B and 20808), is in addition to Cal-Am’s recognized water rights. By implementing the Phase 1 ASR Project and exercising this new right, Cal-Am will be able to reduce its unlawful diversions from the Carmel River during the low-flow months (June through November) by an average of approximately 920 AF.

Second, the language that Cal-Am “should be required to utilize water that is available from the Seaside Basin to help reduce unlawful diversions” refers to how the Proposed Project will be operated in the recovery mode to maximize benefits to the Carmel River and dependent resources during the low-flow season. Specifically, this language refers to how and when the water previously diverted from the Carmel River system and injected into the Seaside Basin will be recovered and used to meet Cal-Am customer demand, instead of diverting from the Carmel

² Cal-Am’s current diversions of up to 7,909 AFY from the Carmel River in excess of its recognized rights (3,376 AFY) are allowed by SWRCB through the exercise of SWRCB’s discretionary authority and are not technically “unlawful.” These diversions are allowed by SWRCB to protect public health and safety (SWRCB Order No. WR 95-10, July 6, 1995, page 37).

River system during the low-flow season. A detailed description of the “operational requirements” governing the recovery operations for the Phase 1 ASR Project is provided in Response to Comment 6-3.

Third, the language refers exclusively to recovery of the “extra injected water” in the Seaside Basin and does not refer to existing or naturally occurring groundwater in the Seaside Basin. It should be noted that in the simulations for the Phase 1 ASR Project, Cal-Am’s production of naturally occurring water from the coastal area of the Seaside Basin is limited to 3,500 AFY (page 8-25), which is consistent with the initial “standard production allocation” specified for Cal-Am from the coastal area of the Seaside Basin in the Final Decision on the Seaside Basin adjudication (Monterey County Superior Court, Case No. M66343, March 27, 2006).

Fourth, the proposed Phase 1 ASR Project will not eliminate all of Cal-Am’s unlawful diversions from the Carmel River or reduce Cal-Am’s production from the coastal area of the Seaside Basin to conform to the safe yield estimate determined in the recent adjudication proceedings. Therefore, in addition to MPWMD’s Phase 1 ASR Project, Cal-Am will need to take other measures to reduce its extractions from both the Carmel River and Seaside Groundwater Basins. Cal-Am has proposed a new water supply project called the Coastal Water Project (CWP). The CWP is proposed to comply with the restriction on diversions from the Carmel River specified in SWRCB Order 95-10 and help reduce the overdraft condition in the Seaside Basin. The CWP consists of a seawater desalination plant in Moss Landing, a desalinated water conveyance system, and ASR facilities that would be designed to provide 11,730 AFY. Cal-Am has prepared a Proponent’s Environment Assessment (PEA) and a Conceptual Design Report (CDR) on the CWP. This information is being reviewed by the California Public Utilities Commission (CPUC), the lead agency on the CWP.

Response to Comment 1-9

The MPWMD thanks the California Coastal Commission for its input regarding the preference of an alternative that would not impact sensitive vegetation. As noted on pages 4-17 and 4-18 of the draft, the Proposed Project would result in the permanent loss of up to 0.7 acre and the temporary disturbance of 0.3 acre of maritime chaparral and sensitive plant species, including Monterey spineflower, sandmat manzanita, Eastwood’s goldenbush, and Kellogg’s horkelia. It should be noted, however, that the Army’s habitat management plan (U.S. Army Corps of Engineers, Sacramento District 1997) took into consideration that this area would eventually be developed within the City of Seaside and that other measures would be in place to compensate for any losses at the proposed well site. As long as the habitat management plan is properly implemented, the loss of these sensitive species will not result in a substantial impact on the environment.

Although Alternative 2 would reduce biological resources impacts, including impacts to the maritime chaparral plant community and the aforementioned special-status plants, this alternative would increase construction-related impacts associated with cultural resources, land use, air quality, and noise. Other impacts

of Alternative 2 would be similar to the Proposed Project. The decision to select an alternative will be based on which option best meets the needs of the MPWMD to provide a well site while resulting in as few adverse environmental effects as possible.

Letter 2



State of California – The Resources Agency

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500



May 22, 2006

Henrietta Stern, Project Manager
Monterey Peninsula Water Management District
Post Office Box 85
Monterey, California 93942-0085
Fax: (831) 644-9560
Email: henri@mpwmd.dst.ca.us

Dear Ms. Stern:

Monterey Peninsula Water Management District (MPWMD)
Phase 1 Aquifer Storage and Recovery Project
SCH # 2004121065

Thank you for the extended opportunity to comment on this project. The Department of Fish and Game (DFG) has reviewed the document for the subject project. Additionally, staff recently met with you on May 17, 2006 to discuss resolution of concerns about the potential impacts to public trust resources resulting from diversions from the Carmel Basin. These concerns had been previously voiced in 2002 and 2005 in Protests to MPWMD's Petitions for Change filed with the SWRCB. This letter will articulate our latest position on these matters, as well as outline some basic procedural issues related to other aspects of your Project.

2-1

The adverse impacts to public trust resources from diversions within the Carmel Basin are well documented. DFG voiced three specific areas of concern in its previous communications with the State Water Resources Control Board and MPWMD with regard to Aquifer Storage and Retrieval (ASR) and the impacts of this proposed diversion.

First, that the project proposes to divert water from this basin for the ASR project in the Seaside Groundwater Basin when water use in that basin has not yet been adjudicated to provide any assurance that water transferred and stored there will be available for return to the Carmel River Basin. At this time, it is our understanding that MPWMD can now guarantee that their diversion to the Seaside Groundwater Basin is actually secure storage of the water, sufficient to reserve it for the benefit of the fish and wildlife of the Carmel River and MPWMD's customers through reduced dry season diversion pumping rates.

2-2

Conserving California's Wildlife Since 1870



Ms. Henrietta Stern
 May 22, 2006
 Page 2

Second, DFG was concerned that the project proposed the elimination of essential permit terms in water applications (WA) 11674B and WA 27614 (Permits 7130B and 20808). The elimination of some of these permit conditions would cause a reduction in resource protection. This issue is currently being addressed in ongoing meetings with MPWMD to resolve our water right protest and allow acceptable changes. 2-3

Finally, DFG is concerned that groundwater recharge in the Seaside Groundwater Basin must not be used to address overdraft problems there, but that diversions from the Carmel taken to ASR storage during higher flow months be used to reduce pumping needed in the Carmel system in the lower flow months. After recent discussions with MPWMD staff, DFG believes that MPWMD can guarantee that ASR diversions will be utilized to offset pumping from the Carmel River system during the dry months. 2-4

Please be advised this project may result in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G). Therefore, a de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Monterey County Clerk on or before filing of the Notice of Determination for this project. 2-5

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a stream or lake, or use material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Actions connected to the installation of the temporary water pipeline wherein any portion of any channel is disturbed are subject to this requirement. This includes horizontal directional drilling under the channel, trenching, and removal of riparian vegetation adjacent to riparian areas. Issuance of SAAs is subject to the California Environmental Quality Act (CEQA). DFG, as a responsible agency under CEQA, will consider the CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement. In the sections that defer the specific restoration of impacted stream features to a future effort, DFG may not be able to use the existing EIR to fulfill its obligations under CEQA. Such projects may therefore require MPWMD to prepare additional CEQA documents as a lead agency. 2-6

The District acknowledges temporary and permanent impacts to sensitive biological communities and several special status plant and animal species, and defers the mitigation of these impacts to the *Installation-Wide Multispecies Habitat* 2-7

Ms. Henrietta Stern
May 22, 2006
Page 3

Management Plan for Former Fort Ord (HMP), which as of this date has not been implemented. DFG and other resource agencies have been engaged in the development of a Habitat Conservation Plan (HCP) and basewide California Endangered Species Act (CESA) permit to provide endangered species take authorization based on the HMP. If the District wishes to commence any activities that may impact any of the State or Federally listed species covered in the HMP before the HCP and CESA permit are finalized, it would first have to obtain necessary take authorizations.

2-7
cont.

The District correctly notes in Mitigation Measure BIO-4 the need to avoid disturbance to bird nests, pursuant to the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Please note that this constraint must be considered during inspection, maintenance, and cleaning operations, as well as during construction.

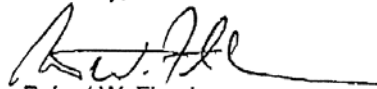
2-8

To obtain further information about the SAA notification process, please access our website at www.dfg.ca.gov/1600; or to request a notification package, contact the Streambed Alteration Program at (707) 944-5520.

If you have any questions about these comments, please contact Mr. Serge Glushkoff, Environmental Scientist, at SGlushkoff@dfg.ca.gov or (707) 944-5597; Ms. Linda Hanson, Staff Environmental Scientist, at LHanson@dfg.ca.gov or (707) 944-5562; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

2-9

Sincerely,



Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

Comment Letter 2—California Department of Fish and Game, May 22, 2006

Response to Comment 2-1

The comment is introductory. No response is required.

Response to Comment 2-2

The commenter's understanding is correct. The Superior Court decision in the Seaside Basin Adjudication confirms that water stored in the Seaside Groundwater Basin may be recovered and used by the party that stores the water, including by injection. This means that the water stored by MPWMD by injection into the Seaside Groundwater Basin as part of the Phase 1 ASR Project will be available for use by MPWMD. Because the Proposed Project operation is to pump stored water during dry periods and to cause pumping that would otherwise occur from Carmel River system to be reduced, the commenter's concern is addressed.

Response to Comment 2-3

MPWMD and the commenter (CDFG) have been meeting to negotiate mutually acceptable resolution of the commenter's protests to MPWMD's water rights petitions before the SWRCB to facilitate the Phase 1 ASR Project. The majority of commenter's concerns have been resolved, and MPWMD anticipates that the remainder will be resolved by the time the ASR Project EIR/EA is certified by the MPWMD Board of Directors.

Response to Comment 2-4

MPWMD agrees that the water diverted from the Carmel River during high-flow periods by Cal-Am for injection into the Seaside Basin as part of the MPWMD Phase 1 ASR Project should not be used to resolve the overdraft condition in the Seaside Basin and agrees that Cal-Am should be required to reduce its diversions from the Carmel River during low-flow periods when injected water in the Seaside Basin is available for recovery. The commenter's concern is similar to concern expressed by NOAA Fisheries (see Response to Comment 6-3). To address these concerns, MPWMD in cooperation with CDFG and NOAA Fisheries, has developed a set of explicit rules to govern the proposed recovery operations. These rules "tie" the amount of water that can be recovered in a year to the amount of water that was injected during the year plus injected water in storage and provide an explicit accounting procedure to track water injected, stored, and recovered over time. These rules will be included as a condition in

the new water right for the Phase 1 ASR Project that will be issued by the SWRCB and held jointly by Cal-Am and MPWMD.

The determination of the amount of water available for recovery will be made at the end of May each year. In the simulation, the determination would be made on June 1 each year. In real-time, it is envisioned that the determination will be made in May by the Memorandum of Agreement (MOA) group (Cal-Am, CDFG, NOAA Fisheries, and MPWMD) as part of the MOA process. In the simulation, once the determination is made, the daily amount of injected water that is targeted for recovery is taken *before* Cal-Am operates its Carmel Valley wells to meet customer demand. This logic ensures that Cal-Am will reduce its diversions from the Carmel River during the low-flow season when injected water is being recovered for Cal-Am customer use and provide improved flow conditions for the Carmel River steelhead. In real-time, it is envisioned that the targeted recovery amounts that have been determined will be incorporated into the *Quarterly Water Supply Strategy and Budgets* for Cal-Am that the MOA develops each year in September, December, March, and June. By including the monthly recovery targets from the Seaside Basin in the budgets, Cal-Am's diversions from the Carmel River during the low-flow season can be reduced accordingly.

Response to Comment 2-5

The comment does not address the adequacy of the draft EIR/EA. No response is required.

Response to Comment 2-6

The Proposed Project does not involve the installation of a water pipeline or any construction of new facilities that would result in channel disturbance, but would instead utilize existing facilities. Therefore, the Proposed Project would not require a streambed alteration agreement (SAA).

Response to Comment 2-7

The U.S. Army obtained a take authorization for 250 acres of projects that included the lands to be occupied by the ASR Project and the Cal-Am temporary pipeline. Any action will be addressed by the Biological Opinions (BOs) obtained by the Army from the USFWS on March 30, 1999, October 22, 2002, and March 14, 2005.

Response to Comment 2-8

The text in Mitigation Measure BIO-4 on page 4-21 of the draft EIR has been modified to reflect the need to avoid tree limb and brush removal along the temporary pipeline during inspection, maintenance, and cleaning, as well as during construction. This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 2-9

No response is required.

Letter 3



MONTEREY BAY
 Unified Air Pollution Control District
 serving Monterey, San Benito, and Santa Cruz counties

MAY - 8 2006 AIR POLLUTION CONTROL OFFICER
 Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

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 Santa Cruz County

Jerry Smith
 Monterey County

May 4, 2006

Ms. Henrietta Stern, Project Manager
 Monterey Peninsula Water Management District
 Post Office Box 85
 Monterey, California 93942-0085

Sent by Facsimile to:
 (831) 644-9560.
 Original by U.S. Mail.

SUBJECT: DEIR/EA FOR AQUIFER STORAGE AND RECOVERY PROJECT

Dear Ms. Stern:

Staff has reviewed the Draft EIR/ Environmental Assessment for the project and submits the following comments for your consideration:

- Existing Air Quality Conditions and Ambient Air Quality Standards. Page 3-5.
 The North Central Coast Air Basin is classified as “Non-Attainment Transitional” for the State ozone standard, not “Moderate Non-Attainment”. Please see the attachment, “Current Attainment Status of the North Central Coast Air Basin (March 15, 2006)”.

3-1
- Air Monitoring Stations. Page 3-6.
 The District no longer maintains air monitoring stations in Monterey or Moss Landing. The Salinas station is located at 855 East Laurel Drive, not at Salinas High School. Please see the attachment, “Current Ambient Air Monitoring Stations in the NCCAB (March 15, 2006)”.

3-2
- Significance Thresholds. Page 3-11.
 The District’s CEQA Air Quality Guidelines were most recently adopted in July 2004, not 2002.

3-3
- Impacts AQ-4 and AQ-5 and Mitigation Measures AQ-1 and AQ-2. Pages 3-13 & 14.
 The mitigation measures include precatory language that is not enforceable. Mitigation Measure AQ-1 specifies that 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.” This language is not enforceable, there is insufficient detail to advise the construction contractor to reduce emissions to a less-than-significant level, and the actual emissions may not require using “as much equipment as possible that meets Tier II engine standards.”
 Mitigation Measure AQ-2 would require operation of diesel equipment “when students are not present”. One might assume this to be before 8 a.m. and after 4 p.m. during the school week, and on weekends when no activities would bring students onto the school grounds. It

3-4
- 3-5**

also specifies that "...construction activities should occur as much as possible when prevailing winds are away from the school." When would that be? In addition, this measure may not need to be written in the conjunctive. The disjunctive ("or") may reduce impacts to a less-than-significant level. David Craft of the District's Engineering Division would be able to provide guidance on this, based on the calculations, using the District's spreadsheets. He may be reached by calling 647-9411 x218.

3-5
cont.

Permits for Pumps and Generators

Should the project require pumps or generators, please contact Lance Ericksen, Manger of the Engineering Division. He may be reached by calling 647-9411 x208.

3-6

Thank you for the opportunity to review and comment on this project.

Sincerely,



Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

Attachments

cc: Lance Ericksen, Engineering Division
David Craft, Engineering Division

**CURRENT ATTAINMENT STATUS OF THE NORTH CENTRAL COAST AIR BASIN
March 2006**

Pollutant	Federal	State
Ozone (O ₃) - 1 hour	Maintenance*	Nonattainment-Transitional
Ozone (O ₃) - 8 hour	Unclassified/Attainment	Not Available**
Carbon Monoxide (CO)	Unclassified/Attainment	Monterey-Attainment San Benito-Unclassified Santa Cruz-Unclassified
Nitrogen Dioxide (NO ₂)	Unclassified/Attainment	Attainment
Inhalable Particulates (PM ₁₀)	Unclassified/Attainment	Nonattainment
Fine Particulates (PM _{2.5})	Unclassified/Attainment	Attainment

G:\WP9\DOCS\CEQA EIRs\Web Tables\Attainment Status.wpd

Notes for Table:

- * The Federal 1 hour standard was revoked in the NCCAB on June 15, 2005.
- ** Area designations in relation to the California 8-hour ozone standard are expected to be made by ARB in November 2006, after the rule is finalized. It is expected that the NCCAB will be designated as a nonattainment area for the California 8-hour standard

Website for current area designation maps for the State and National standards:

<http://www.arb.ca.gov/desig/adm/adm.htm>

A table of the current State and National standards can be accessed at:

<http://www.arb.ca.gov/aqs/aaqs2.pdf>

Version Dated March 15, 2006

**CURRENT AMBIENT AIR MONITORING STATIONS IN THE NCCAB
March 2006**

Data	SL	HL	CV	SC	WT	SV	DV	KC	PN
Ozone	•	•	•	•	•	•	•	•	•
Nitrogen Dioxide	•						•		
Oxides of Nitrogen	•						•		
Carbon Monoxide	•						•		
Oxides of Sulfur							•		
PM ₁₀ FRM	•	•	•	•	•		•	•	
PM _{2.5} FRM	•			•					
PM ₁₀ BAM	•	•		•					
PM _{2.5} BAM	•			•					
Wind Speed	•	•			•	•	•	•	•
Wind Direction	•	•			•	•	•	•	•
Ambient Temp.	•	•	•	•	•	•	•	•	•
Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS	SP	SP	SP
Operating Agency	MBU	MBU	MBU	MBU	MBU	MBU	MBU	IND	NPS

G:\Wp9\DOCS\CEQA EIRs\Web Tables\Network Sites 2006.wpd

Notes for Table:

- | | |
|--|--|
| <p>SL - Salinas, 855 E. Laurel Dr.
 HL - Hollister, 1979 Fairview Rd
 CV - Carmel Valley, 34 Ford Rd
 SC - Santa Cruz, 2544 Soquel Ave.
 WT - Watsonville, 444 Airport Blvd.
 KC - King City, 1001 Industrial Way
 SC - Scotts Valley, 4859 Scotts Valley Dr.
 PN - Pinnacles National Monument, 5000 Hwy 146
 DV - Davenport, Marine View and Center Ave.</p> | <p>SLAMS - State and Local Ambient Monitoring Station
 SP - Special Purpose Monitor
 MBU - Monterey Bay Unified Air Pollution Control District
 IND - Industry
 NPS - National Parks Service
 FRM - Federal Reference Monitor
 BAM - Beta Attenuation Mass Monitor</p> |
|--|--|

Version Dated March 15, 2006

Comment Letter 3—Monterey Bay Unified Air Pollution Control District, May 4, 2006

Response to Comment 3-1

The text on page 3-5 of the draft EIR/EA has been corrected to reflect that the North Central Coast Air Basin (NCCAB) is non-attainment transitional, not moderate attainment. This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 3-2

The text on page 3-6 of the draft EIR/EA has been corrected to accurately identify the nearest monitoring station in Salinas. This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 3-3

The text on page 3-11 of the draft EIR/EA has been revised to indicate that the MBUAPCD Guidelines were adopted in July 2004. This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 3-4

The draft EIR/EA indicates Impact AQ-4 is less than significant. However, Mitigation Measures AQ-1 and AQ-2 were included in the draft EIR/EA as recommendations to further reduce diesel particulate matter emissions, particularly those emissions created if well construction were to occur at the alternative well site adjacent to Roger S. Fitch Middle School. Because the effects of the Proposed Project are expected to be less than significant and the alternative well site is not part of the Proposed Project, Mitigation Measures AQ-1 and AQ-2 are no longer being proposed to further reduce adverse effects, and the conclusion for Impact AQ-5 has been modified to indicate that the impact is less than significant. The proposed well site is sufficiently removed from sensitive receptors to not pose a significant health threat. These changes were discussed with MPUAPCD staff prior to completing the final EIR/EA (Getchell pers. comm.). This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 3-5

This question and request for conversations with school district personnel prior to construction would be appropriate if the Proposed Project included construction of the well adjacent to Roger S. Fitch Middle School. However, the proposed

well site is not adjacent to the school and is not expected to have an adverse effect on school children. Therefore, Mitigation Measures AQ-1 and AQ-2 are no longer necessary to further reduce construction-related air emissions.

Response to Comment 3-6

The comment is noted. Should the Proposed Project require pumps or generators, the MPWMD will contact the MBUAPCD Engineering Division Manager.

Comment Letter 4—Monterey County Department of Health, May 8, 2006

Response to Comment 4-1

No response is required.

Letter 5



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, CA 95404-6528

May 4, 2006

In response refer to:
151422SWR04SR20193:JEA

MAY - 8 2006

Henrietta Stern, Project Manager
Monterey Peninsula Water Management District
P.O. Box 85
Monterey, California 93942-0085

MPWMD

Dear Ms. Stern:

This letter is in regards to Monterey Peninsula Water Management District's (MPWMD) Draft Environmental Impact Report/Environmental Assessment (EIR/EA), and Notice of Public Hearing for MPWMD Phase 1 Aquifer Storage and Recovery Project; State Clearinghouse Number 2004121065. It is my understanding copies of the EIR/EA were mailed to Responsible Agencies on March 23, 2006. Joyce Ambrosius of my staff contacted you on May 4th inquiring if NOAA's National Marine Fisheries Service (NMFS) was sent a CD copy. You verified a copy was mailed out on March 23rd, however, according to our records, we did not receive it.

5-1

I would like to request another CD copy in order for us to review your proposed project and am also requesting a time extension to submit written comments on this project. I understand the Public Review Period closes on May 8, 2006.

If you have any questions, please contact Ms. Joyce Ambrosius at (707) 575-6064 or joyce.ambrosius@noaa.gov.

Sincerely,

Dick Butler
Santa Rosa Area Office Supervisor
Protected Resources Division

cc: R. Strach, NMFS, Sacramento



Comment Letter 5—National Oceanic and Atmospheric Administration, May 4, 2006

Response to Comment 5-1

The comment does not address the adequacy of the draft EIR/EA. No response is required; a subsequent letter was received on May 22, 2006, with a full set of comments.

Letter 6



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, CA 95404-6528

May 22, 2006

In response refer to:
151422S\WR04SR20193:JEA

Henrietta Stern, Project Manager
Monterey Peninsula Water Management District
P.O. Box 85
Monterey, California 93942-0085

Dear Ms. Stern:

Thank you for the opportunity to comment on the Environmental Impact Report /Environmental Assessment (EIR/EA) for the Monterey Peninsula Water Management District's (MPWMD) Aquifer Storage and Recovery (ASR) Project. The MPWMD is proposing an ASR project that will allow for changes in water supply operations that will benefit natural resources of the Carmel River and groundwater resources of the Seaside Basin. The Phase 1 ASR project would divert a maximum of 2,400 acre-feet per year (AFY), and an average of 963 AFY, from the Carmel River and yield an estimated average annual amount of 1,050 AF from the Seaside Basin. This stored water would be available for extraction and use through California American Water's (Cal Am) existing distribution system during the low flow season in lieu of pumping water from the Carmel River Basin.

6-1

South-Central California Coast Evolutionarily Significant Unit (ESU) steelhead are listed as threatened under the Endangered Species Act (ESA) of 1973 and are present in the Carmel River. Populations of steelhead within the South-Central California Coast ESU are at critically low levels. Any adverse impacts to them must be minimized to assure these species do not become extinct. Decreasing flows in the river can delay the migration of upstream adults and downstream juveniles within the system. Decreased flows can contribute to increased water temperatures and a decrease in water quality, both detrimental to salmonids.

MPWMD has incorporated NOAA's National Marine Fisheries Service's (NMFS) bypass flow requirements from NMFS' June 2002 report, "Instream Flow Needs for Steelhead in the Carmel River, bypass flow recommendations for water supply projects using Carmel River waters" (Flow Report) into the ASR Project. This mitigation will ensure adequate flows are available for spawning and migration of listed steelhead throughout the length of the river.

Our bypass flow requirements, written in 2002, were based, in part, on existing stream channel conditions. As you are aware, stream channel conditions vary over time. For most of the last 30

6-2



years, the stream channel below River Mile (RM) 5.5 has consisted mostly of sand, lacking in any significant amounts of gravel. However, in the last few years, sand has moved out of the system, leaving a gravel bed. Because of this morphological change, it will be necessary to monitor below RM 5.5 to determine if channel modifications are necessary to provide for passage and to examine the adequacy of bypass flows for spawning and nursery habitat below RM 5.5. We recommend the EIR/EA include this additional monitoring requirement as mitigation in addition to the requirements in our Flow Report.

6-2
cont.

According to the EIR/EA, MPWMD's ASR Project will, on average, extract 963 AFY of water from the Carmel River during the high flows in the winter season. In keeping with State Water Resource Control Board's Order 95-10, this same amount should be reduced from Cal Am's unauthorized diversions, to provide flows for listed steelhead. Mitigation Measure GWH-4: *Operate Project in Compliance with NOAA Fisheries Recommendations and to Reduce Unlawful Diversions* states, "In addition, Cal Am should be required to utilize water that is available from the Seaside Basin to help reduce unlawful diversions from the Carmel River." Stating "Cal Am *should be required* (my italics) to utilize water..." is not a mitigation measure for impacts to streamflows. NMFS recommends MPWMD change this mitigation measure to state, "The maximum diversion of 11,285 AFY by Cal Am from the Carmel River shall be decreased to reflect the average 963 AFY being diverted for ASR."

6-3

Analyses in the EIR/EA show streamflows will likely flow farther and persist longer during the low flow season from June through November with the proposed Project. NMFS supports the ASR Project because it will potentially improve habitat conditions for juvenile steelhead during the time of year when streamflow has been critically low or non-existent due to water withdrawals.

6-4

If you have any questions concerning the above comments, please contact Ms. Joyce Ambrosius at (707) 575-6064 or joyce.ambrosius@noaa.gov.

Sincerely,

Dick Butler
Santa Rosa Area Office Supervisor
Protected Resources Division

cc: R. Strach, NMFS, Sacramento
R. Thomas, CRSA
K. Urquhart, CDFG, Monterey

Comment Letter 6— National Oceanic and Atmospheric Administration, May 22, 2006

Response to Comment 6-1

The comment is introductory. No response is required.

Response to Comment 6-2

The commenter correctly notes that the NOAA Fisheries bypass flow recommendations are, in part, based on stream channel conditions. The information used to develop bypass flow recommendations for upstream migration below River Mile (RM) 5.5 was based on analysis of water depths over a series of critical riffles in the lower Carmel River during 1982, 1992, and 1997 (Dettman and Kelley 1986, Dettman 1989, Dettman 1994, Fisheries Working Group 1994, Entrix 2000). While data from these years represent a wide range of streamflows, the streambed was dominated by sand and fine gravel below RM 5.5 during this historical period. Since that time and with few exceptions, the streambed in this reach has coarsened and the low-flow channel has narrowed in many places. Hypothetically, these changes are beneficial in the sense that the flows necessary for maintenance of adequate arrays of water depth and velocity should be lower than originally recommended. However, as the commenter notes, streambed conditions are variable depending on the supply and transport of sand to the channel. In response to the commenter's recommendation for monitoring and modifying channel conditions below RM 5.5, MPWMD believes this is appropriate as long as there is an opportunity and mechanism to lower the bypass flow recommendation, if streambed and channel conditions are maintained and persist in a favorable condition. For example, with the improved, existing streambed conditions, bypass flows of less than 60 cfs may provide adequate passage conditions.

To address these issues MPWMD proposes to adopt Mitigation Measure AR-1, which is presented in Chapter 2 of this final EIR/EA and added to page 5-21 of the draft EIR.

Regarding the commenter's recommendation that it will be necessary to examine the adequacy of the bypass flows for spawning and rearing habitats below RM 5.5, MPWMD notes that no specific study has been conducted relating spawning habitats or rearing habitats to streamflow in the lower section of the river. Considering this basic lack of information, MPWMD believes the best approach is to continue monitoring the number of steelhead nests in this reach and counts of the number of juvenile fish rescued in the reach below RM 5.5, as part of the existing Mitigation Program for the MPWMD Water Allocation Program. With sufficient time, this monitoring will yield additional information on the adequacy of

streamflow and channel conditions in providing suitable spawning and rearing habitats for early phases in the steelhead life history in this reach of the river.

Response to Comment 6-3

NOAA Fisheries' concerns regarding assurance that the proposed Phase 1 ASR Project will operate as designed and will benefit the Carmel River and dependent resources as described in the DEIR/EA are shared by the CDFG. Specifically, these agencies want assurances that, not only will the Proposed Project comply with the bypass flow requirements recommended by NOAA Fisheries in their June 2002 report, but also that the "excess"³ water diverted for injection into the Seaside Basin during high-flow periods will be used to benefit the Carmel River system and steelhead during low-flow season. More specifically, the agencies want a "guarantee" that, over time, the amount of water diverted from the Carmel River for injection into the Seaside Basin during the December – May period will be offset by the amount of additional water pumped by Cal-Am from the coastal area of the Seaside Basin during the June – November period. By having this additional water available for pumping from the Seaside Basin in the low-flow season and assuming the same customer demand, Cal-Am would be able to reduce its diversion from the Carmel River system during the low-flow season by a commensurate amount and provide improved flow conditions for steelhead.

In meetings with NOAA Fisheries and CDFG in Spring/Summer 2006, it became clear that more explicit rules governing when and how the injected water in the Seaside Basin would be recovered were needed, and that these "recovery rules" should be incorporated into the new water right permit sought by MPWMD and Cal-Am for the Phase 1 ASR Project. These recovery rules would be analogous to the bypass flow requirements recommended by NOAA Fisheries for diversions for injection. The recovery rules were developed by MPWMD staff following discussions with NOAA Fisheries and CDFG staff in June 2006 and incorporated into MPWMD's operations model, CVSIM3. The rules and revised computer code were tested and a new simulation, Run #7, was generated on June 25, 2006. The recovery rules are summarized below.

Phase 1 ASR Project Recovery Rules

The 6-month recovery period, June 1 through November 30, used in the original simulation (Run #4) was retained. During this period, the annual amount of water determined to be available for recovery at the end of May each year was uniformly distributed. For example, if it was determined that 1,200 AF were available for recovery during the upcoming recovery season, then 200 AF would be recovered each month between June and November. The daily amount that would be recovered from the Seaside Basin by MPWMD's Phase 1 ASR wells and provided to Cal-Am for customer service, instead of Cal-Am pumping its

³ Excess water refers to groundwater in the alluvial aquifer underlying the Carmel River that can be diverted by Cal-Am without lowering the mean daily streamflow in the Carmel River below the daily bypass flows recommended by NOAA Fisheries in their June 3, 2002 report, *Instream Flow Needs for Steelhead in the Carmel River, Bypass Flow Recommendations for Water Supply Projects Using Carmel River Waters*.

wells in the Lower Carmel Valley, would vary between 6.5 and 6.7 acre-feet per day (AFD), depending on the number of days in the respective month.

The annual amount of water available for recovery will depend on (a) the amount of water injected into the basin during the preceding injection season, (b) the cumulative amount of water injected into the basin during previous injection seasons that has not been recovered and remains in storage, (c) the annual recovery target specified, and (d) the maximum carryover amount specified.

The amount of water injected into the basin during the preceding injection season will vary depending on streamflow conditions in the Carmel River mainstem and the reach of the Carmel River from which the diversions are made. For the simulation, mean daily streamflows based on historical mainstem and tributary flows in the Carmel River Basin between October 1, 1957, through September 30, 2002, were used. For the revised simulation, it was assumed that all diversions from the Carmel River by Cal-Am for the Phase 1 ASR Project would come from wells in the reach between San Clemente Dam and RM 5.5. As explained in Response to Comment 9-2, the bypass flow requirements in this reach are greater than the requirements in the reach between RM 5.5 and the lagoon. Accordingly, less water would be available for diversions from the Carmel River for injection into the Seaside Basin in the revised simulation. As originally simulated, the amount of water available annually for injection from the reach *below* RM 5.5 would average 963 AF and range from 0 to 2,374 AF. As revised, the amount of water available annually for injection from the reach *above* RM 5.5 would average 918 AF and range from 0 to 2,348 AF.

The cumulative amount of water injected into the basin during previous injection seasons that has not been recovered and remains in storage is tracked during the simulation and represents the amount of carryover storage in the Seaside Basin that is available at the end of each injection season due to the Phase 1 ASR Project. If available, this storage can be used to meet the specified recovery target. Similarly, this storage can be added to, if the amount injected during the previous injection season exceeds the specified recovery target.

For the revised simulation, the annual recovery target was specified at 1,500 AFY. This target was selected through an iterative process so that the average annual amount of water recovered from the Seaside Basin and provided to Cal-Am (i.e., 916 AFY) approximated the average annual amount of water diverted from the Carmel River by Cal-Am for injection (i.e., 918 AFY) over the 45-year simulation period. In the revised simulation, the amount of water recovered annually from the Seaside Basin would range from 31 to 1,475 AF.

For the revised simulation, the maximum carryover amount specified was 5,000 AF. This maximum acts as an upper bound on the amount of injected water that is allowed to accumulate in the Seaside Basin. In the simulation, the 5,000 AF maximum was selected to provide 1,000 AFY for the 5-year drought of record in the Monterey Peninsula area (i.e., Water Years 1987 through 1991). If a series of wet years occur, diversions for injection would be sufficient to meet the 1,500 AF annual recovery target, and carryover storage would accumulate over time, eventually exceeding 5,000 AF at the end of the injection season. In this

situation, the injected water in storage in the Seaside Basin in excess of the 5,000 AF will be added to the annual recovery target amount for the upcoming recovery season and distributed uniformly over the 6-month recovery period. For example, if carryover storage was 5,800 AF at the end of the preceding injection season, then the recovery target for the upcoming recovery season would be 2,300 AF (1,500 AF target goal + 800 AF excess storage), with approximately 380 AF recovered each month for 6 months.

The determination of the amount of water available for recovery is made at the end of May each year. In the simulation, the determination is made on June 1 each year. In real-time, it is expected that the determination will be made in May by the MOA group (Cal-Am, CDFG, NOAA Fisheries, and MPWMD) as part of the MOA process. In the simulation, once the determination is made, the daily amount of injected water that is targeted for recovery is taken *before* Cal-Am operates its Carmel Valley wells to meet customer demand. This logic ensures that Cal-Am will reduce its diversions from the Carmel River during the low-flow season when injected water is being recovered for Cal-Am customer use. In real-time, it is expected that the targeted recovery amounts that have been determined will be incorporated into the *Quarterly Water Supply Strategy and Budgets* for Cal-Am that the MOA develops each year in September, December, March, and June.

The revised logic, by “tying” the amount of water that can be recovered in a year to the amount of water that was injected during that year plus injected water in storage, provides an explicit accounting procedure to track water injected, stored, and recovered over time. This procedure can be used to ensure that water diverted from the Carmel River for injection during the high-flow winter months is used to reduce Cal-Am’s diversions from the Carmel River during the low-flow summer months.

Based on the revised simulation for the Phase 1 ASR Project, annual injections would average 918 AFY and annual recoveries would average 916 AFY. With the Phase 1 ASR Project, Cal-Am’s diversions from the Carmel River for customer service would average 9,885 AFY. Without the Phase 1 ASR Project (i.e., No-Project), Cal-Am’s diversions from the Carmel River for customer service would average 10,521 AFY. This reduction in Cal-Am’s diversions from the Carmel River for customer service would occur during the June through November period and range from a 98 to 121 AF reduction per month, thus providing a benefit during the most critical months of the year. It should be noted that with the Phase 1 ASR Project, Cal-Am would also divert an average of 918 AFY of excess water from the Carmel River during the high season for injection. This diversion would be made under a new water right held jointly by Cal-Am and MPWMD. Diversions by Cal-Am for injection during the high-flow season would not count against the 11,285 AFY diversion limit specified in SWRCB Order 95-10 for Cal-Am’s diversions from the Carmel River for customer service.

MPWMD is confident that the recovery rules developed in cooperation with CDFG and NOAA Fisheries will provide adequate assurance to the agencies that the proposed Phase 1 ASR Project will be operated as designed and will provide

the benefits described in the DEIR/EA to the Carmel River and dependent resources, including the listed Carmel River steelhead population. The recovery rules will be included as a condition of the new water right that will be issued by the SWRCB and held jointly by Cal-Am and MPWMD.

The revised operations described above would not change any of the environmental conclusions described in the draft EIR. The final EIR will include revised text for Chapter 8, "Modeling Assumptions," to describe the revised operating procedures.

Response to Comment 6-4

The comment expresses support of the Proposed Project and does not address the adequacy of the draft EIR/EA. No response is required.



Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

Letter 7

May 9, 2006

Henrietta Stern
Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, CA 93942-0085

Subject: Aquifer Storage and Recovery Project
SCH#: 2004121065

Dear Henrietta Stern:

The State Clearinghouse submitted the above named Joint Document to selected state agencies for review. The review period closed on May 8, 2006, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse

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MAY 15 2006

MPWMD

7-1

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2004121065
Project Title Aquifer Storage and Recovery Project
Lead Agency Monterey Peninsula Water Management District

Type JD Joint Document
Description The proposed Aquifer Storage and Recovery project involves the construction of a new well adjacent to the existing Santa Margarita test well (both located on Former Fort Ord) that would be used to inject water diverted from the Carmel River into the aquifer during times of high flows (December to March). This water would later be extracted for use during the dry season. The timing, not the total amount of water diverted from the Carmel River, would be changed by implementing the project.

Lead Agency Contact

Name Henrietta Stern
Agency Monterey Peninsula Water Management District
Phone (831) 658-5621 **Fax**
email
Address 5 Harris Court, Building G
City Monterey **State** CA **Zip** 93942-0085

Project Location

County Monterey
City Carmel, Monterey, Seaside
Region
Cross Streets General Jim Moore Boulevard and Eucalyptus Road
Parcel No. N/A
Township N/A **Range** N/A **Section** N/A **Base** Long. 36

Proximity to:

Highways 1,68,218
Airports Monterey Peninsula
Railways N/A
Waterways Pacific Ocean
Schools Fitch Middle School
Land Use Open Space on the Former Fort Ord
 Low-Density Residential

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Geologic/Seismic; Noise; Public Services; Toxic/Hazardous; Traffic/Circulation; Vegetation; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 3; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 5; Department of Health Services; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 03/22/2006 **Start of Review** 03/23/2006 **End of Review** 05/08/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

Comment Letter 7—State Clearinghouse and Planning Unit, May 9, 2006

Response to Comment 7-1

No response is required.

HAND
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MAY - 8 2006

MPWMD



California
American Water

Letter 8

May 8, 2006

Henrietta Stern, Project Manager
Monterey Peninsula Water Management District
P.O. Box 85
Monterey, CA 93942-00085

SUBJECT: Draft Environmental Impact Report/Environmental Assessment (EIR/EA) dated March 2006 Comments, Monterey Peninsula Water Management District (MPWMD) Aquifer Storage and Recovery Project

Dear Ms. Stern:

California American Water (CAW) thanks you for this opportunity to comment on the Monterey Peninsula Water Management District's (MPWMD) Draft Environmental Impact Report for the MPWMD's proposed Aquifer Storage and Recovery (ASR) project. As you know, we are supportive of ASR as a means of enhancing the overall water management and supply within the District, and we are actively planning for ASR as a component of California American Water's proposed Coastal Water Project (CWP).

8-1

The CWP has been evaluated in the Proponents Environmental Assessment submitted to the California Public Utilities Commission (CPUC) in July 2005. The PEA is required as part of the CPUC's CEQA process, and will serve as the basis of the EIR. The CWP was identified as part of the preferred alternative as a result of an extensive screening analysis of long-term water supply components known as the CPUC's "Plan B" process, recommending a seawater desalination plant at Moss Landing and ASR facilities. Please see the attached Project Description of the CWP.

Based on our review of the draft EIR/EA, we have the following comments:

1. The Executive Summary, page ES-2 of the document, states that "The ASR would utilize new and existing water collection and conveyance facilities. New facilities include an MPWMD-owned injection/extraction well located on land currently owned and managed by the U.S. Army on the former Fort Ord and an MPWMD-owned pipeline connecting the injection/extraction well with the Cal-Am temporary pipeline located west of General Jim Moore Boulevard. No other new facilities would be constructed because the project would utilize the existing Cal-Am wells, pipelines, and pumping facilities that currently divert and transport water from the Carmel River."
2. In addition, on page 2-2, paragraph 3, states that a maximum of 3,000 gpm is going to be diverted from the river for ASR injection.

8-2

CAW has worked closely with MPWMD on analysis of supplying water to the proposed ASR well. Several alternatives were analyzed and reviewed with





MPWMD. The current CAW system is not capable of delivering 3,000 gpm to the ASR wells in addition to satisfying normal CAW system demand on a consistent basis. CAW is currently proposing modifications of its existing system that would allow the delivery of 3,000 gpm to the ASR wells on a consistent basis.

8-2
cont.

CAW would again like to thank the MPWMD for the opportunity to comment at this stage of the proposed ASR project. We hope to coordinate closely with you on this and other efforts to improve water supply operations in the Carmel Valley Aquifer and Seaside Groundwater Basin that will benefit the natural resources of the Carmel River and the groundwater resources of the Seaside Groundwater Basin.

Sincerely,

Steve Leonard
Vice President/General Manager
Monterey Division

Enclosure



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MAY - 8 2006

**California American Water
Coastal Water Project****MPWMD****Project Description**

The proposed Coastal Water Project (CWP) would be implemented by California American Water (CAW) to provide 11,730 acre-feet per year (AFY) of water for CAW to replace a portion of its Carmel Valley Aquifer withdrawals and 1,000 AFY of what CAW presently withdraws from the over drafted Seaside Basin. The project would respond directly to the directive of the State Water Resources Control Board (SWRCB) Order 95-10 that CAW secure a water supply to replace 10,730 acre-feet per year of withdrawals from the Carmel Valley Aquifer, and is consistent with the CPUC's previous Plan B alternative long-term water supply studies.

Facilities for the CWP include the desalination plant, pipelines, and related facilities in the Moss Landing area, predominantly on the existing Moss Landing Power Plant (MLPP) property and property owned by Duke Energy of North America (DENA), generally east of Highway 1 and north of Dolan Road (the "Duke East" desalination plant site). This area includes a mixture of industrial properties such as MLPP and the former National Refractories Mineral Corporation Plant (NRMCP) south of MLPP, as well as the Moss Landing Harbor District, agricultural operations, and highly sensitive native and riparian habitat. The desalination plant would obtain source water from MLPP's existing seawater intake in Moss Landing Harbor, which receives freshwater from the Elkhorn Slough and Old Salinas River channel. The desalination plant brine would be discharged into MLPP's existing outfall, located in Monterey Bay.

Project facilities south of Moss Landing for the CWP include conveyance lines, ASR facilities, and the Terminal Reservoir and pump station. These facilities would traverse or be located in portions of Moss Landing, Castroville, Marina, and Seaside, primarily within existing public rows, current or former railroad rows, or agricultural roads. Several crossings of existing drainage channels would be required, including the Moro Cojo Slough south of Moss Landing and the Salinas River north of Marina. Generally, Project conveyance lines would be located east of Highway 1 or within the Transportation Authority of Monterey County (TAMC) row (a former railroad row that is currently a utility corridor). Within the City of Seaside, portions of Project conveyance lines along General Jim Moore Boulevard traverse Federal lands of the former Fort Ord military base, now under the jurisdiction of the Fort Ord Reuse Authority (FORA).

CWP facilities south of Seaside are conveyance lines, the Tapy Flats Pump Station, and the Segunda Pump Station Expansion. CAW presently owns land for new facilities that would be co-located with existing CAW facilities, such as land at the Crest Tank and Segunda Reservoir, although most of the Project construction would require temporary and/or permanent easements and/or fee title, to be acquired by CAW or others. The conveyance facilities would be located primarily in public rows, although some facilities would traverse native vegetation south and north of Highway 68. This area south of Seaside has more diverse and steep terrain than the central and northern portions of the Project area, particularly the access road and related pipeline alignments from Highway 68 to the existing Crest Reservoir and the proposed Segunda Pump Station Expansion.

The CWP would use a combination of existing and proposed CAW facilities. The major new elements of the Project are the desalination plant at Moss Landing, desalinated water conveyance facilities (and related pump stations and reservoirs), and ASR facilities.

RECEIVED

MAY - 8 2006

MPWMD

Implementation of the ASR component of the CWP would require a permit from the SWRCB to divert Carmel River water to ASR storage during the winter. Any application to divert to ASR storage would be subject to the SWRCB's public review process, and conditions imposed by the SWRCB.

CWP FACILITIES SUMMARY

Facility	Quantity	Size and Characteristics
Desalination Plant:		
Source Water Pipeline	7,000 LF	54-inch diameter
Return Flow Pipeline	8,000 LF	24-inch diameter
Equalization Basin	1	4.8 MG
Plant Inlet Pump Station	1	23.5 mgd, 200 HP (installed)
Pretreatment System	1	22 mgd, submerged media membrane filtration
Reverse Osmosis System	1	10 mgd, membranes
Post Treatment System	1	Lime and carbon dioxide
Desalinated Water Conveyance:		
Clear Well	2	1.5 MG (each)
Desalinated Water Pump Station	1	7,000 gpm, 1,200 HP (installed)
Desalinated Water Pipeline	96,000 LF	30-inch diameter
Terminal Reservoir	2	3 MG (each)
Tarpy Flats Pump Station	1	10,200 gpm, 1,000 HP (installed)
ASR Systems:		
ASR Pipeline	10,000 LF	30-inch diameter
ASR Pump Station	1	4,400 gpm, 150 HP (installed)
ASR Wells	3	800-foot depth, 2.1-mgd injection/ 4.3-mgd extraction
Segunda Standby Pump	1	2,300 gpm, 200 HP
Segunda Pipeline	28,000 LF	30-inch and 36-inch diameter
LF = linear feet; MG = million gallons; mgd = million gallons per day; HP = horsepower; gpm = gallons per minute.		

Comment Letter 8—California American Water, May 8, 2006

Response to Comment 8-1

The comment is introductory. No response is required.

Response to Comment 8-2

The commenter correctly notes that the Cal-Am system as currently configured would not be capable of delivering up to 3,000 GPM on a consistent basis for ASR injection. MPWMD, Cal-Am, and their respective technical consultants have met on several occasions in spring–summer 2006 to discuss alternative modifications to the Cal-Am delivery system that would allow additional diversions to reliably serve the Phase 1 ASR Project. Based on assurances received from Cal-Am to date, it is expected that this ongoing analysis will result in Cal-Am making system modifications that will allow for such diversions to occur as designed and described in the draft EIR/EA.

Letter 9

RECEIVED

May 4, 2006

MAY 10 2006

MPWMD

MPWMD

MAY 10 2006

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Dear Henrietta Stern,

Included below are some of Carmel River Steelhead associations comments on Monterey Peninsula Water Management District Draft Aquifer Storage and Recovery Project. We would like to include more in our comments but time has been short.

Our major concerns are that some of the criteria and thresholds of significance as well as assumptions used to evaluate river and fish response were uncertain. We are concerned that the modeled river and the real time river would not behave as you projected.

A particularly troubling problem is the upstream migration period. The draft EIR points out that in 1991 MPWMD staff found five critical riffles below Schulte Road. Some how they determined that 60 CFS or more was necessary to pass Steelhead freely over these riffles with the substrate conditions they found. The Draft also references D.W. Kelly's 1986 recommendation that 75 CFS are necessary to safely pass Steelhead in the lower Carmel River. Apparently N.O.A.A Fisheries used D.W. Kelly's data to arrive at a minimum flow requirement of 60 CFS. I believe all appreciate the fact that most every year the stream bed topography, location and criticalness of riffles change. Twenty years ago with Kelly and fifteen years ago with W.P.W.M.D. staff. The analysis only fit those condition; the river bed has changed. I can personally attest to the various location and varying criticalness of riffles. All good fishermen look for critical riffles because migrating fish can get trapped below them in low flow periods. Eighteen years ago I observed just such a riffle above Garland Park in the River Ranch reach of the Carmel. The flow was above 150 CFS. Two years ago there was a wildly circulated verbal report of 50 plus fish under the most upstream golf cart bridge at Quail Lodge. Nearly two weeks later I personally waded the reach and counted 75 large Steelhead waiting to go upstream. This year I received a call from Maurice Coury who reported 25 large Steelhead under the middle golf cart bridge at Rancho Canada. It was in February and the river was closed to fishing with the flow over 70 CFS.

9-1

These examples of critical riffles interrupting the migration of threatened Steelhead should cause a reconsideration of the 60 CFS criteria you have chosen to use in your model and operations. Since the Steelhead population is in a steep multiyear decline, nothing should be used as operational standard that might push Carmel River Steelhead from threatened to endangered or to extinction. Anything close to minimum flows should be avoided. A fair mitigation or operation that should be taken before every ASR season would include a thorough evaluation of all critical riffles and flows necessary for passage. Once identified the riffles should be constantly monitored. If fish are found to be blocked or delayed A.S.R. should be stopped until either flows increase enough or corrective measures that alleviate the disruption of migration are successful.

A stated assumption was the A.S.R. water would only be removed from the farthest down stream wells. Maximum production below RM5.5 is 8.4 CFS so as the assumption goes the 6.7 CFS ASR water can be taken from the lower wells. If ASR water is coming from the lowest wells the normal Cal-Am production has to go to the upper wells. This increased production upstream will impacting more river miles. It is even doubtful that any ASR water will come from the lower wells because the water from them costs more to pump and needs more mineral removal. Also the lowest wells are supposed to be pumped the most during the dry season and are often broken or serviced during ASR season. Unless there is a MPWMD ordinance that requires it , all the water will come from the cheapest upstream source and all the modeled flows and comparisons are in error for real time operations.

9-2

The draft EIR report that, as a result of modeling unimpaired flows states “that flows during the last 30 years have not been adequate to support a self-sustaining Steelhead population.” This seems to indicate that either the models are wrong or the years simulated have too many dry or critically dry years included. More meaningful data, as far as Steelhead are concerned, would more realistically be compared from the 100 years of rainfall and flow information you state is available.

9-3

There are some problems with trusting the conclusion in this draft EIR. ASR logic and assumptions are not necessarily reliable in the real world.

Some examples: There will be uniform distribution of SGB water in the June to November “recovery” period.

- assume ASR wells inject 13.3 AF/day
- assume Cal-Am can move 13.3 AF/day to and from well
- assume annual inflow from upgradient at 4,955 AF
- assume Cal Am average annual product and ASR at 4,720 AF

“the increased yield in coastal area of the SGB was determined heuristically through a series of CVSIM3 simulations.

9-4

There is a lot of uncertainty in the above assumptions.

The following statements from the Draft EIR also create doubts in the conclusions of improvement in conditions for fish. “Actual operations may differ depending on future project objectives”. “More storage in SGB could be held in reserve for municipal use during extended dry periods”.

9-5

When the water table is drawn down in the summer it takes a certain lag time for fresh surface flow to percolate down to the support level. The draw down is greatest in the lower river especially during dry periods. I believe the effect on surface flow when there is a + or - 1,000 AF draw down out of 10,000AF makes a insignificant difference in most years. I question whether the lag in percolation time was fully appreciated in the models.

9-6

A major flaw in the project as far as the environment is concerned is reflected in this

9-7

statement found in the EIR “the project would allow but not require Cal-Am to decrease river water use during low flow season”, June through November. It should be understood that many times low flows extend into late December, and if Cal-Am does not decrease diversions, the project fails for fish.

9-7
cont.

The MPWMD should require by ordinance that Cal-Am be required to use seaside and ASR water only during the dry season as long as that season lasts and reduce by like amounts diversion from the Carmel River.

Sincerely,



Roy L. Thomas, President
Carmel River Steelhead Association

Comment Letter 9—Carmel River Steelhead Association, May 4, 2006

Response to Comment 9-1

The commenter correctly notes that the success of adult upstream migration is affected by the combination of streamflow, channel configuration, and substrate conditions. The commenter correctly notes that NOAA Fisheries bypass flow recommendations were based on past studies under varying streambed conditions and channel configurations. There is agreement that the channel conditions change from year-to-year and that bypass flows should be set to provide adequate minimum passage conditions, recognizing that conditions may change. To this end, the commenter's recommendation for a mitigation measure "to thoroughly evaluate all critical riffles prior to each ASR season and the flows necessary for passage" is reasonable. However, it is not reasonable to constantly monitor each critical riffle during the migration period. Instead, a reference site, such as the MPWMD gaging station at the Highway One Bridge or the USGS Near Carmel gaging station, should be used for this purpose. The commenter's concerns and recommendations parallel those of NOAA Fisheries (Comment 6-2). Please refer to Response to Comment 6-2.

MPWMD agrees that no operational standard should be employed that changes the status of the Carmel River steelhead from threatened to endangered or that results in extinction. MPWMD notes that a primary purpose of the Phase 1 ASR Project is to begin reversing the water extractions that continue to imperil the steelhead population. With the proposed ASR Project, this is accomplished by diverting water during periods of surplus (December through May), storing this water in the Seaside Groundwater Basin, and recovering this water primarily during the summer–fall period. The Phase 1 ASR Project thereby reduces diversions from the Carmel River Basin during periods when existing diversions: (1) severely limit other phases of the steelhead lifecycle, (2) continue to reduce the juvenile population, and (3) threaten the survival of the adult steelhead population.

Response to Comment 9-2

The commenter correctly notes that the analysis in the DEIR assumed that the water diverted from the Carmel River system for injection into the Seaside Basin for the Phase 1 ASR Project would be pumped from Cal-Am's farthest downstream well (i.e., Rancho Cañada well at RM 3.13). MPWMD agrees that this assumption is inconsistent with actual operations and Condition 5 of SWRCB Order No. WR 95-10, which requires Cal-Am to satisfy the water demands of its customers by extracting water from its downstream wells to the maximum practicable extent. To correct this inconsistency and ensure that the modeled flows conformed to actual operations, MPWMD revised its operations model (i.e., CVSIM3) and generated a new simulation for the proposed Phase 1 ASR Project. Specifically, the logic in the model was revised to comply with

Condition 5 of Order 95-10 and require that the water from the Carmel River system needed to meet Cal-Am's customer demand would be produced from Cal-Am's most downstream wells and that the water diverted from the Carmel River system during the high-flow period for injection would be produced from the next upstream wells.

It should be noted that the bypass flow requirements in the reach between San Clemente Dam and RM 5.5 are greater than the requirements in the reach between RM 5.5 and the lagoon. By moving the diversion point for water for injection from the reach below RM 5.5 to the reach above RM 5.5, less water was available for injection. As originally simulated, an average of 963 AFY was available for injection from the reach below RM 5.5. With the revised logic and the requirement that the water for injection would be pumped from the reach above RM 5.5, an average of 918 AFY was available for injection.

The revised simulation results for the Phase 1 ASR Project were compared with the original simulation results and do not differ significantly. Because the amount of water available for diversion from the Carmel River system for injection is slightly less, less water is injected into the Seaside Basin and available for recovery during the low-flow season.

Response to Comment 9-3

The statement that "flows during the last 30 years have not been adequate to support a self-sustaining steelhead population" refers to the *impaired* flows that have occurred in the Carmel River during the last 30 years (i.e., 1975 through 2005) and the decline in the steelhead population that has been observed. As explained in Appendix A of the draft EIR, *Carmel River/Freshwater Aquatic Life*, the current run of 500 to 1,000 fish has been maintained by implementing efforts to reconfigure Cal-Am's diversions, rescuing juvenile fish, carrying out a brood stock program during the 1987 to 1991 drought, and constraining water production in the Carmel River Basin (page A-13). The impairment to the natural flows in the Carmel River during the 1975 to 2005 period is due primarily to Cal-Am's dam operations and groundwater diversions by Cal-Am and non Cal-Am well owners.

The statement that "flows during the last 30 years have not been adequate to support a self-sustaining steelhead population" is supported by field observations and does not rely on models or the distribution of water year types during the last 30 years. As explained in Chapter 8, "Surface and Groundwater Hydrology and Water Quality," the 45-year period of record used in the impact analyses (i.e., Water Years 1958 to 2002) is considered representative of the range of hydrologic extremes expected over the life of the Proposed Project. Specifically, this period includes a short-duration, severe drought period (Water Years 1976–1977) and a longer duration, less severe drought period (Water Years 1987–1991). The selected period of analysis also includes extremely wet years such as Water Years 1983, 1995, and 1998. Note that the simulation model operates on a *daily* time-step and over the 45-year period covers a span of approximately 16,425 days. In this regard, it is believed that the period is sufficiently long

enough to determine the water supply performance of the proposed Phase 1 ASR Project and its impact on the Carmel River steelhead run.

Response to Comment 9-4

MPWMD acknowledges that there is inherent uncertainty in predicting future events and effects on complex ecosystems like the Carmel River. However, MPWMD believes the conclusions described in the draft EIR are accurate and is confident of the reliability of computer simulation results as relative performance measures. The CVSIM model has been evaluated by independent experts who determined it to be an acceptable predictive tool. Regarding the “reliability” of the five assumptions listed, the following information is provided.

- 1) The assumption that the amount of injected water in the Seaside Basin that would be available each year for recovery would be uniformly distributed during the June 1 through November 30 “recovery” period was made to facilitate the comparison between the No-Project and Phase 1 ASR simulation results. In reality, it is envisioned that the interagency management group that meets each year to negotiate the MOA governing Cal-Am’s operations during the low-flow season (i.e., usually May through December) will also determine the amount of injected water available for recovery and the *daily* distribution that will provide the greatest benefit to the Carmel River system and dependent steelhead resource. Decisions by the MOA group, which is presently composed of staff from Cal-Am, CDFG, NOAA Fisheries, and MPWMD, will be based on current “real-time” conditions. For example, if it is determined that 1,200 AF are available for recovery during the 6-month recovery period, then assuming a “uniform” distribution, 200 AF would be produced each month between June and November and approximately 6.5 AF would be pumped from the coastal portion of the Seaside Basin rather than the from the Lower Carmel each day between June and November. However, based on actual conditions, the MOA group could decide to apply a non-uniform distribution. For example, the 1,200 AF available for recovery could be ramped down with 400 AF pumped in June; 300 AF pumped in July; 200 AF pumped in August; and 100 AF pumped in September, October, and November. Under this distribution, daily pumping from the Seaside Basin would vary from 13.3 AF in June to 3.2 AF in October and would provide greater benefits during the early summer months.
- 2) The assumption that the proposed ASR wells will inject 13.3 AFD, which is equivalent to 3,000 gallons per minute (gpm), is based on experience with MPWMD’s existing Santa Margarita Test Injection Well (SMTIW) and proposed improvements to Cal-Am’s distribution system. Presently, the SMTIW is capable of injecting up to 1,250 gpm or 5.5 AFD. For the proposed Phase 1 ASR Project, it is planned that a second larger ASR well will be constructed near the existing SMTIW. The second well (i.e., ASR Well #2) will be a larger diameter well with greater capacity and should be able to inject up to 1,750 gpm or 7.7 AFD. As designed, both wells will operate together in the injection mode during the injection season and should be capable of injecting 13.3 AFD into the Seaside Basin.

- 3) The assumption that Cal-Am can move 13.3 AFD to the proposed Phase 1 ASR site for injection and move 13.3 AFD of recovered water from the Phase 1 ASR site to its distribution system for delivery to its customers is based on discussions with Cal-Am and its consultants, RBF Consulting. RBF has modeled Cal-Am's distribution system and identified areas where potential problems could occur with the proposed Phase 1 ASR Project. Various options have been developed to address these problem areas and ensure Cal-Am's ability to reliably provide water to its customers and to the proposed ASR site for injection and subsequent recovery. As described in the draft EIR, Cal-Am is proposing to construct a temporary aboveground pipeline that would connect the existing SMTIW and proposed ASR Well #2 to the Hilby distribution main (page 2-16). This temporary 16-inch diameter pipeline would be installed parallel and to the west of the existing General Jim Moore Boulevard alignment and would be approximately 6,700 feet in length. A permanent pipeline will be installed once the new road alignment is finalized and other long-term water supply issues are resolved. The temporary pipeline will be in place no more than 5 years and will be sized to transmit 3,000 GPM (13.3 AFD) to and from the site.
- 4) The assumption that annual subsurface inflow into the coastal area of the Seaside Basin from upgradient inland areas is approximately 4,955 AFY is based on findings from previous hydrogeologic investigations of the Seaside Groundwater Basin. These previous estimates were based on an application of Darcy's Law, which relates subsurface flow to cross-sectional area, gradient, and hydraulic conductivity of the aquifer material. As explained in the DEIR, these earlier subsurface inflow estimates were compared to updated estimates developed for the Seaside Basin adjudication proceedings (i.e., *Seaside Groundwater Basin: Update on Water Resource Conditions* [Yates et al. April 2005]). The subsurface inflow used in previous simulations (i.e., 4,995 AFY) is between the range developed by Yates and others (i.e., 4,000–5,740 AFY) and was retained for the Phase 1 ASR Project simulations.
- 5) The incremental yield associated with the proposed Phase 1 ASR Project was computed by comparing the Cal-Am's average annual production from the coastal area of the Seaside Basin with the Phase 1 ASR Project (4,720 AFY) with Cal-Am's average annual production from the coastal area of the Seaside Basin with the No-Project (3,670 AFY). The increase in average annual production (i.e., 1,050 AFY) was due to the increased recharge to the basin that resulted from the injection operations. With this increased recharge, it was possible to increase simulated extractions without further depleting storage. The Phase 1 ASR Project yield (4,720 AFY) was determined by a series of trial simulations. In each successive simulation, the "target" parameter for Cal-Am's production from the coastal area of the Seaside Basin was incrementally increased until the amount of usable storage in the coastal area of the basin approximated the minimum usable storage simulated for the No-Project alternative (i.e., 119 AF at the end of November 1991).

Response to Comment 9-5

MPWMD agrees that the two statements noted in the comment are confusing and could create doubt. MPWMD therefore hereby removes these statements from page 8-23 of the draft EIR based on water rights protest dismissal negotiations with CDFG and NOAA Fisheries. These revisions are presented in Chapter 2 of this final EIR.

As part of these discussions, additional assurances have been made to ensure benefit to the Carmel River as the primary purpose of the Phase 1 ASR Project. These are reflected in revised text and mitigation measures in the final EIR as well as recommended conditions on a water rights permit for the Phase 1 ASR Project to be issued by the SWRCB. MPWMD's objective is to divert excess water from the Carmel River system during high-flow winter and spring months for injection and storage in the Seaside Groundwater Basin so that increased pumping from the Seaside Basin is possible and allows corresponding reductions in diversions from the Carmel Valley alluvial aquifer during the low-flow summer and fall months to maintain groundwater storage and surface water flow in the lower Carmel Valley. Similarly, the excess water diverted from the Carmel River system during high-flow periods should be used exclusively to benefit the Carmel River system and dependent resources during low-flow periods. By utilizing the water injected in the Seaside Basin and reducing diversions by Cal-Am from the Carmel River system for customer water demand during the low-flow season, groundwater storage in the Carmel Valley will be maintained and Carmel River streamflow will last longer and flow farther. This increased flow will provide both immediate and long-term benefits to the Carmel River steelhead run (e.g., less time to refill the aquifer and initiate flow to the ocean in the fall).

Response to Comment 9-6

In CVSIM3, percolation of Carmel River streamflow through the bed of the Carmel River was simulated using a relationship between streamflow and infiltration losses developed by the USACE in their *Feasibility Report on Water Resources Development for the Carmel River* (May 1981, Volume II, Appendix C, *Hydrology and Hydraulics*). The relationship was developed for the reach between San Clemente Dam and the Carmel River near the Carmel gaging station. The monthly relationship is represented by a family of three curves that relate to aquifer storage: (1) zero percolation rate when the aquifer is full, (2) medium percolation rate when the aquifer is drawn down 1,000 AF, and (3) maximum percolation rate when the aquifer is drawn down more than 3,000 AF. As an example, when the aquifer is drawn down 1,000 AF and monthly streamflow is 2,000 AF, monthly percolation is estimated to be approximately 600 AF. Similarly, when the aquifer is drawn down more than 3,000 AF and monthly streamflow is 2,000 AF, monthly percolation is estimated to be 1,700 AF. Thus, the lag time in percolation has been taken into account in the simulation model.

Response to Comment 9-7

The commenter's concern is that Cal-Am would not be required to reduce its diversions from the Carmel River during low-flow periods when injected water in the Seaside Basin is available for recovery and, as a result, the Proposed Project would not benefit the Carmel River steelhead as described in the draft EIR/EA. This concern is similar to concerns expressed by NOAA Fisheries (see Response to Comment 6-3) and CDFG (see Response to Comment 2-4). To address these concerns, the MPWMD, in cooperation with CDFG and NOAA Fisheries, has developed a set of explicit rules to govern the proposed recovery operations. These rules "tie" the amount of water that can be recovered in a year to the amount of water that was injected during the year plus injected water in storage and provides an explicit accounting procedure to track water injected, stored, and recovered over time. These rules will be included as a condition in the new water right for the Phase 1 ASR Project that will be issued by the SWRCB and held jointly by Cal-Am and the MPWMD.

The determination of the amount of water available for recovery will be made at the end of May each year. In the simulation, the determination would be made on June 1 each year. In real time, it is envisioned that the determination will be made in May by the MOA group (Cal-Am, CDFG, NOAA Fisheries, and the MPWMD) as part of the MOA process. In the simulation, once the determination is made, the daily amount of injected water that is targeted for recovery is taken *before* Cal-Am operates its Carmel Valley wells to meet customer demand. This logic ensures that Cal-Am will reduce its diversions from the Carmel River during the low-flow season when injected water is being recovered for Cal-Am customer use. In real time, it is envisioned that the targeted recovery amounts that have been determined will be incorporated into the *Quarterly Water Supply Strategy and Budgets* for Cal-Am that the MOA develops each year in September, December, March, and June. Based on actual conditions, it should be noted that the MOA group could decide to extend the recovery period into December. This decision would be subject to the availability of injected water in storage.

(Handwritten initials)

Letter 10

Carmel Valley Association
P.O. Box 157 Carmel CA 93924

April 17, 2006

Board of Directors
MPWMD

DEIR - Aquifer Storage & Recovery - Phase 1

We congratulate staff on a well-prepared and detailed EIR.

We have a question regarding the temporary pipeline connection to the Cal-Am system, which will serve for only five years. Would it not be more cost-effective to install a permanent connection, preferably one large enough to serve a Phase 2 of the project? This alternative should be addressed in the final EIR.

(Handwritten signature)
Robert Greenwood
Director, CVA

Comment Letter 10—Carmel Valley Association, April 17, 2006

Response to Comment 10-1

It would be more cost effective to install a permanent pipeline to serve the Proposed Project rather than a temporary pipeline; however, several constraints preclude pursuing this option at the present time. First and foremost, the permanent location for this pipeline is slated for the right-of-way of the proposed future realignment of General Jim Moore Boulevard. Permanent location of this pipeline is not possible along the present alignment of this road. Access to the future realignment is currently not available and will not be available until construction of the realigned road is underway, which is still at least several years away. Issues including clearance for MEC and the land transfer schedule from the Army to the City of Seaside need to be resolved before road realignment work and installation of utilities infrastructure can begin in the area where the permanent pipeline is to be placed. In addition, the size for a permanent pipeline in the realigned roadway will be a function of future water supply project decisions that will be based on analyses that have not yet been completed and are not expected to be completed in time for the scheduled startup of the Phase 1 ASR Project next year.



Letter 11

Department of Toxic Substances Control

Maureen F. Gorsen, Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

June 1, 2006

Ms. Henrietta Stern
Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, California 93942-0085

COMMENTS ON DRAFT MONTEREY PENINSULA WATER MANAGEMENT DISTRICT AQUIFER STORAGE AND RECOVERY PROJECT, ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT, FORMER FORT ORD, CALIFORNIA

Dear Ms. Stern:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft Monterey Peninsula Water Management District Aquifer Storage and Recovery Project, Environmental Report Environmental Assessment prepared for the Monterey Peninsula Water Management District by Jones and Stokes.

DTSC provides the following comments for your consideration prior to construction of the project.

Page ES-8, Executive Summary, Hazardous Materials, 4th Sentence: In the executive summary, as well as the remainder of the document, the term "unexploded ordnance" should be replaced with Munitions and Explosives of Concern (MEC). It is also recommended that the additional clearance and coordination activities that would be necessary with the Army prior to construction be outlined more clearly in the executive summary section and expanded in Section 11, Hazardous Materials, Mitigation Measure HAZ-1, Page 11-8. Additional considerations to be followed when doing construction in this area including:

11-1

11-2

- 1. Construction activities at the project site are subject to Monterey County Code, Ordinance 5012, Subsection 1 dated 2005, Title 16 "Environment", Chapter 16.1 "Digging and Excavating on the Former Fort Ord", which can be found at:

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Ms. Henrietta Stern
June 2, 2006
Page 2

<http://municipalcodes.lexisnexis.com/codes/montereyco>. This ordinance prohibits excavation, digging, development, or ground disturbance unless an excavation permit is obtained and the permit requirements are followed.

2. The US Army Corps of Engineers (USACE) Engineer Pamphlet EP 75-1-2 entitled "*Munitions and Explosives of Concern (MEC) Support During Hazardous, Toxic and Radioactive Waste (HTRW) and Construction Activities*" dated August 1, 2004, which can be found at: <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/ep75-1-2/toc.htm> will be followed by the USACE MEC Safety Specialist to determine the type of construction oversight that will be needed based on the type of construction activities to be performed.

11-2 cont.

If you have any questions, please contact me at (916) 255-6407.

Sincerely,



Roman Racca, PG
Remedial Project Manager
Office of Military Facilities

cc: California Environmental Quality Act Tracking Center
Office of Environmental Analysis, Regulations and Audits
1001 I Street, 22nd Floor/Post Office Box 806
Sacramento, California 95812-0806



**US Army Corps
of Engineers®**

EP 75-1-2
01 August 2004

**MUNITIONS AND EXPLOSIVES OF CONCERN
(MEC) SUPPORT DURING HAZARDOUS,
TOXIC, AND RADIOACTIVE WASTE (HTRW)
AND CONSTRUCTION ACTIVITIES**

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Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Maureen F. Gorsen, Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Barbara Cook
Site Mitigation, Region 2

FROM: Guenther W. Moskat, Chief
Planning & Environmental Analysis Section

DATE: March 29, 2006

SUBJECT: CEQA ENVIRONMENTAL DOCUMENT REVIEW FOR: AQUIFER STORAGE & RECOVERY, MONTEREY, MONTEREY COUNTY SC:2004121065

The Office of Environmental Analysis, Regulations & Audits (OEARA) received the attached document from an outside agency for DTSC review as a potential *Responsible or Interested Agency* pursuant the California Environmental Quality Act (CEQA). A preliminary review of this document by our office shows that the project may fall within the regulatory authority of DTSC because it involves one of the following land uses that could potentially expose individuals to hazards or hazardous materials:

- AN EXISTING OR PROPOSED SCHOOL SITE
- X SENSITIVE LAND USES (e.g., daycare facility, nursing home, hospital)
- NON-SENSITIVE LAND USES (e.g., commercial or industrial facilities)

This document is being forwarded to your office for further assessment. Please provide the Lead Agency that is identified on the attached Notice of Completion Form with any comments you may have on this document before the close of the comment period: (05/08/2006). After your review, please complete the information requested in the box below and return this form to our office at the following address:

CEQA Tracking Center
Office of Environmental Analysis, Regulations & Audits
1001 I Street, 22nd Floor/ P.O. Box 806
Sacramento, CA 95812-0806

<input checked="" type="checkbox"/> COMMENTS WERE SENT TO THE LEAD AGENCY and a copy forwarded to OEARA via: <ul style="list-style-type: none"> <input type="checkbox"/> An attachment to this document <input type="checkbox"/> Fax @ (916) 323-3215 <input type="checkbox"/> COMMENTS WERE <u>NOT</u> SENT TO THE LEAD AGENCY because: <ul style="list-style-type: none"> <input type="checkbox"/> The project did not fall within the jurisdiction of DTSC <input type="checkbox"/> The document adequately assessed impacts from the proposed project as it relates to DTSC's area of jurisdiction
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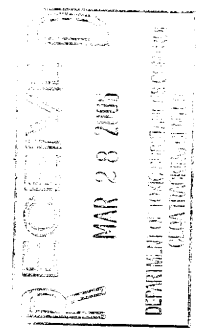
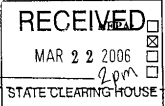
Form A
Notice of Completion and Environmental Document Transmittal SCH # 2004121065

For U.S. Mail: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

Project Title: Monterey Peninsula Water Management District Aquifer Storage and Recovery Project
Lead Agency: Monterey Peninsula Water Management District **Contact Person:** Henrietta Stern
Street Address: 5 Harris Court, Building G **Telephone:** 831/658-5621
City: Monterey **Zip Code:** 93942-0085 **County:** Monterey

Project Location:
County: Monterey **City/Nearest Community:** Seaside, Former Fort Ord
Cross Streets: General Jim Moore Blvd and Eucalyptus Road **Zip Code:**
Assessor's Parcel No.: n/a **Section:** n/a **Twp.:** n/a **Range:** n/a **Base:** n/a
Within 2 Miles: State Hwy #: 1, 68, 218 **Waterways:** Pacific Ocean
Airports: Monterey Peninsula Airport **Railways:** n/a **Schools:** Fitch Middle School

Document Type:
CEQA: NOP Draft EIR NOI Other: Joint Document
 Early Cons Supplement to EIR EA Final Document
 Neg Dec Subsequent EIR Draft EIS Other:
 Mit Neg Dec Other: FONSI



Local Action Type:
 General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other:

Development Type:
 Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD
 Office: Sq.ft _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft _____ Acres _____ Employees _____ Power: Type _____ MW
 Educational: _____ Waste Treatment: Type _____ MGD
 Recreational: _____ Hazardous Waste: Type _____
Total Acres (approximate): _____ Other: aquifer storage and recovery well on Former Fort Ord

Project Issues That May Have a Significant or Potentially Significant Impact:
 Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Sewer Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other:

Present Land Use/Zoning/General Plan Designation:
 The well area is currently open space on the Former Fort Ord. The Fort Ord Reuse Plan identifies this area as low-density residential.

Project Description: (please use a separate page if necessary)
 The Proposed Aquifer Storage and Recovery project involves the construction of a new well adjacent to the existing Santa Margarita test well (both located on Former Fort Ord) that would be used to inject water diverted from the Carmel River into the aquifer during times of high flows (December to March). This water would later be extracted for use during the dry season. The timing, not the total amount of water diverted from the Carmel River, would be changed by implementing the project.

State Clearinghouse Contact: SM (916) 445-0613
 State Review Began: 3-23-2006
 SCH COMPLIANCE: 5-8-2006

- Project Sent to the following State Agencies**
- | | |
|---|--|
| <input checked="" type="checkbox"/> Resources | <input type="checkbox"/> State/Consumer Svcs |
| <input type="checkbox"/> Boating & Waterways | <input type="checkbox"/> General Services |
| <input checked="" type="checkbox"/> Coastal Comm | Cal EPA |
| <input type="checkbox"/> Colorado Rvr Bd | <input type="checkbox"/> ARB - Airport Projects |
| <input type="checkbox"/> Conservation | <input type="checkbox"/> ARB - Transportation Projects |
| <input checked="" type="checkbox"/> Fish & Game # 3 | <input type="checkbox"/> ARB - Major Industrial Projects |
| <input type="checkbox"/> Delta Protection Comm | <input type="checkbox"/> Integrated Waste Mgmt Bd |
| <input type="checkbox"/> Forestry & Fire Prot | <input type="checkbox"/> SWRCB: Clean Wtr Prog |
| <input type="checkbox"/> Historic Preservation | <input type="checkbox"/> SWRCB: Wtr Quality |
| <input checked="" type="checkbox"/> Parks & Rec | <input checked="" type="checkbox"/> SWRCB: Wtr Rights |
| <input type="checkbox"/> Reclamation Board | <input checked="" type="checkbox"/> Reg. WQCB # 5 |
| <input type="checkbox"/> Bay Cons & Dev Comm | <input checked="" type="checkbox"/> Toxic Sub Ctrl-CTC |
| <input checked="" type="checkbox"/> DWR | Yth/Adlt Corrections |
| <input type="checkbox"/> OES (Emergency Svcs) | <input type="checkbox"/> Corrections |
| Bus Transp Hous | Independent Comm |
| <input type="checkbox"/> Aeronautics | <input type="checkbox"/> Energy Commission |
| <input type="checkbox"/> CHP | <input checked="" type="checkbox"/> NAHC |
| <input checked="" type="checkbox"/> Caltrans # 5 | <input type="checkbox"/> Public Utilities Comm |
| <input type="checkbox"/> Trans Planning | <input checked="" type="checkbox"/> State Lands Comm |
| <input type="checkbox"/> Housing & Com Dev | <input type="checkbox"/> Tahoe Rgl Plan Agency |
| <input type="checkbox"/> Food & Agriculture | |
| <input checked="" type="checkbox"/> Health Services | |
| | <input type="checkbox"/> Conservancy |
| | <input type="checkbox"/> Other: |

Please note State Clearinghouse Number (SCH#) on all Comments
 SCH#: 2004121065
 Please forward late comments directly to the Lead Agency

AQMD/APCD 20
 (Resources: 3/25)

Comment Letter 11—Department of Toxic Substances Control, June 1, 2006

Response to Comment 11-1

The text on page *xix* of the draft EIR/EA has been corrected to modify the phrase “unexploded ordnance” (UXO) to “Munitions and Explosives of Concern” (MEC). This change is made to the first occurrence of UXO in the Acronyms section of the EIR; all subsequent occurrences are also hereby revised. This change is presented in Chapter 2 of this final EIR/EA.

Response to Comment 11-2

The text on pages 11-9 and 11-10 of the draft EIR/EA has been corrected to expand Mitigation Measure HAZ-1. This change is presented in Chapter 2 of this final EIR/EA.

Public Hearing Comment 12—Robert Greenwood, Carmel Valley Association, April 17, 2006

Summary

The commenter requests that the final EIR address the cost of installing a permanent pipeline connection to the Cal-Am system, large enough to serve Phase 2 of the project.

Response to Comment 12

Please see Response to Comment 10-1.

Public Hearing Comment 13—John Fischer, April 17, 2006

Summary

The commenter expresses thanks for receiving an answer to a previous question about the old Monterey Bay oil storage plant.

Response to Comment 13

Because the comment does not address the adequacy of the draft EIR/EA, no response is required.

Revised Mitigation Monitoring Plan

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

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

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

Vegetation and Wildlife

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

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

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

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

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

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

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

Aquatic Resources

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

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

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

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

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

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

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

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

Cultural Resources

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

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

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

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

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

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

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

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

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

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

Surface and Groundwater Hydrology and Water Quality

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

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

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

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

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

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

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

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

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

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

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

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

Noise

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Hazards and Hazardous Materials

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

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

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

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

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

Public Services and Utilities

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

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

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

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

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

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

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

Visual Resources

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

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

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

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

Cumulative Impacts

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

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

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

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

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

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

Temporary Pipeline Analysis

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 5 References Cited

Printed References

- Binford, L. R. 1980. Willow Smoke and Dogs Tails: Hunter Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45 (1): 4–20. Available: <<http://www.californiaprehistory.com/reports01/rep0023.html>>.
- Breschini, G.S., and Haversat, T. 1980. *Preliminary Archaeological Report and Archaeological Management Recommendations for CA-Mnt-170, on Pescadero Point, Monterey County, California*. MS. on file at the Northwest Information Center, Sonoma State University, Rohnert Park, California.
- . 1993. *Report on Archaeological Investigations for Portions of CA-Mnt-1612, Pacific Grove, Monterey County, California*. Available: <<http://www.californiaprehistory.com/reports>>.
- Burt, W.H., and R.P Grossenheider. 1980. *A Field Guide to the Mammals*. 3rd edition. Boston, MA: Houghton Mifflin Company.
- California Air Resources Board. 1998. *Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Appendix III, Part A: Exposure Assessment, April*. Sacramento, CA.
- . 2003. *Proposed Amendments to the Area Designation Criteria and area Designations for State Ambient Air Quality Standards and Maps of Area Designations for State and National Ambient Air Quality Standards*. December. Sacramento, CA
- California Division of Mines and Geology. 1997. Guidelines for evaluation and mitigating seismic hazards in California. (Special Publication 117.) Last revised: May 28, 2002. Available: <gmw.consrv.ca.gov/shmp/SHMPsp117.asp>. Accessed: June 26, 2003.
- . 2000. Digital Database of Faults from the Fault Activity Map of California and Adjacent Areas. (DMG CD 2000-006).

- California Governor's Office of Planning and Research. 2003. *Guidelines for the Preparation and content of the Noise Element of the General Plan*. Appendix A in State of California General Plan Guidelines. Sacramento, CA.
- California Native Plant Society (CNPS). 2001. *Inventory of Rare and Endangered Plants of California*. (6th edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. Sacramento, CA: Native Plant Society.
- California Natural Diversity Database. 1999. List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base. January. Sacramento, CA: Natural Heritage Division, Department of Fish and Game.
- . 2005a. Rare Find 3, Version 3.0.5 (April 29, 2005). Records search of the Marina, Seaside, Monterey, Spreckels, and Salinas 7.5-minute quadrangles. Sacramento, CA: California Department of Fish and Game.
- . 2005b. Rare Find 3, Version 3.0.5 (April 29, 2005). Records search for Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*). Sacramento, CA: California Department of Fish and Game.
- . 2005c. Rare Find 3, Version 3.0.5 (April 29, 2005). Records search for American badger (*Taxidea taxus*) in Monterey County. Sacramento, CA: California Department of Fish and Game.
- California State Parks, et al. 2006. *Carmel River Barrier Beach and Lagoon. Development of a Long Term Adaptive Management Plan, Criteria For Maintaining Listed Threatened And Endangered Species Habitat Values*. Developed by a consortium of agencies including California Dept of Parks and Recreation, National Marine Fisheries Service, Monterey County Public Works, Monterey County Water Resources Agency, Monterey Peninsula Water Management District, U.S. Fish and Wildlife Service, and U.S. Army Corp of Engineers.
- Camp, Dresser & McKee. 2003. Monterey Peninsula Water Supply Project Alternatives; Final Phase 1 Technical Memorandum. March. Prepared for the Monterey Peninsula Water Management District. Walnut Creek, CA.
- City of Seaside. 2003a. City website. Available: <www.ci.seaside.ca.us>. Accessed July 29, 2003.
- . 2003b. *City of Seaside Draft General Plan*. Seaside, CA.
- . 2005. *Seaside General Plan*. August. Seaside, CA.
- Clark, J., W. Dupré, and L. Rosenberg. 1997. Geologic map of the Monterey and Seaside 7.5-minute quadrangles, Monterey County, California: A digital database. U.S. Geological Survey Open File Report 97-30.
- Cook, T. 1978.

- Soil survey of Monterey County, California. Washington DC: U.S. Department of Agriculture, Soil Conservation Service.
- Dettman, D.H. 1986. Relationships between steelhead sport catch, angling success, and streamflows in the Carmel River during 1984, Appendix F in D.W. Kelley, *Assessment of the Carmel River Steelhead Resource*, Vol I. Prepared for the Monterey Peninsula Water Management District. Monterey, CA.
- . 1989. *Evaluation of Instream Flow Recommendations for Adult Steelhead Upstream Migration in the Lower Carmel River*. October. (Monterey Peninsula Water Management District Technical Memorandum 89-05). Monterey, CA.
- . 1994. *Recommended Flows for Incubation of Steelhead Eggs below San Clemente Dam – Spring 1994*. (MPWMD Technical Memorandum No. 94-02). March.
- Dettman, D. H., and D. W. Kelley. 1986. *Assessment of the Carmel River Steelhead Resource*. Vol. I. Biological Investigations. Prepared for the Monterey Peninsula Water Management District. Monterey, CA.
- Dupré, William, R. 1990. Quaternary Geology of the Monterey Bay Region, California, in *Geology and Tectonics of the Central Coast Region, San Francisco to Monterey, Volume and Guidebook*. Association of Petroleum Geologists, Pacific Section. June.
- Ecosystems West Consulting Group. 2001. *Biological Assessment of California Red-legged Frog for the Carmel River Dam and Reservoir Project, Monterey County, California*. December. Interim Draft. Prepared for Monterey Peninsula Water Management District, U.S. Army Corps of Engineers, and California-American Water Company. Santa Cruz, CA.
- Entrix. 2000. *Final Draft Biological Assessment for the Seismic Retrofit of San Clemente Dam*. Prepared for U.S. Army Corps of Engineers. January 7.
- Environmental Simulations, Inc., (2003), Guide to Using AquiferWin32/WinFlow–WinTran Version 3.
- Federal Transit Administration. 1995. *Transit Noise and Vibration Impact Assessment*. Washington, DC.
- Fields, W.C. 1984. The invertebrate fauna of the Carmel River system and food habits of fish in the Carmel River system. Appendix C to *Assessment of Carmel River Steelhead Resource: Its Relationship to Streamflow and to Water Supply Alternatives*. Vol. I., D. W. Alley & Associates. Prepared for the Monterey Peninsula Water Management District. Monterey, CA.
- Fink, Augusta. 1972. *Monterey County. The Dramatic Story of its Past*. Santa Cruz, CA: Western Tanager Press.

- Fisheries Working Group. 1994. *Completion Report: Recommended Instream Flow Requirements for the Carmel River Steelhead Resource*. Prepared by Monterey Peninsula Water Management District, California Dept of Fish and Game, and National Marine Fisheries Service. March.
- Fort Ord Reuse Authority. 1997. *Fort Ord Reuse Plan*. Prepared with technical assistance from EMC Planning Group, Inc. and EDAW, Inc. June. Marina, CA.
- Froke, J. B. 2005. *Biological Assessment for a Temporary Emergency Intertie of the California American Water System to the Santa Margarita Test Injection Well - California Tiger Salamander - Former Fort Ord, Monterey County, California*. March. Prepared for U.S. Army Presidio of Monterey. Seaside, CA.
- Fugro West, Inc. 1997. *Hydrogeologic Assessment, Seaside Coastal Groundwater Subareas, Phase III Update*.
- Griffin, J.R. 1976. Native plant reserves at Fort Ord. *Fremontia* 4(2):25–28.
- Hart, E. W., and W. A. Bryant. 1997. *Fault-rupture Hazard Zones in California: Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zone Maps*. California Division of Mines and Geology Special Publication 42. Sacramento, CA.
- Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Sacramento, CA: State of California, the Resources Agency, Department of Fish and Game.
- James, G. W. 2005. *Surface Water Dynamics at the Carmel River Lagoon, Water Years 1991 through 2005*. (Technical Memorandum 05-01). Monterey Peninsula Water Management District. 44 pp + Appendices.
- Jennings, C. 1994. Fault activity map of California and adjacent areas with locations and ages of recent volcanic eruptions. California Geologic Data Map Series, Map No. 6. Sacramento, CA: California Department of Conservation, Division of Mines and Geology.
- Jennings, M. R., and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final report. Rancho Cordova, CA: California Department of Fish and Game, Inland Fisheries Division.
- Kelley et al. 1987. *Preservation of the Carmel River Steelhead Run with Fish Passage Facilities over New San Clemente Dam or with a Hatchery near Its Base*. Prepared for the Monterey Peninsula Water Management District. 26 pp. + Appendices.
- Kyle, D. E. 1990. *Historic Spots in California*. Stanford, CA: Stanford University Press.

- Levy, R. 1978. Eastern Miwok. In *California*, edited by R. F. Heizer, pp. 398–413. Handbook of North American Indians, vol. 8, W. C. Sturtevant, general editor. Smithsonian Institution: Washington, DC.
- Mayer, K. E., and W. F. Laudenslayer, Jr. 1988. *A Guide to Wildlife Habitats of California*. October. Sacramento, CA: California Department of Forestry and Fire Protection.
- McEwan D., and T. A. Jackson. 1986. *Steelhead Restoration and Management Plan for California*. February. State of California, the Resources Agency, California Department of Fish and Game. 234 pp.
- McNeish, C. M. 1989. *An Inventory of the Riparian Vegetation Resource of the Carmel Valley*. Prepared for Monterey Peninsula Water Management District, Monterey CA.
- Milliken, R. 1992. Ethnographic and Ethnohistoric Background for the San Francisquito Flat Vicinity, Carmel Valley, Monterey County, California. Appendix 2 in *Baseline Archaeological Studies at Rancho San Carlos, Carmel Valley, Monterey County, California* by Gary S. Breschini and Trudy Haversat. Submitted to Rancho San Carlos Partnership.
- Monterey Bay Unified Air Pollution Control District. 2004. *CEQA Air Quality Guidelines*. Monterey, CA.
- Monterey County. 2001. Draft, 21st Century, Monterey County General Plan. December. Available: <<http://www.co.monterey.ca.us/gpu/Reports/Draft%20General%20Plan.htm>>. Accessed: July 1, 2003.
- Monterey Peninsula Water Management District. 1994. *Monterey Peninsula Water Supply Project Final Environmental Impact Report and Statement*. Volume I – Summary and Chapters 1-24. (State Clearinghouse No. 03033025). March. Prepared by EIP Associates. San Francisco, CA.
- Monterey Peninsula Water Management District. 1996. *Evaluation of MPWMD Five-Year Mitigation Program 1991–1996*. Final. A component of the MPWMD Water Allocation EIR. October. Monterey, CA.
- . 2004. *Environmental and Biological Assessment of Portions of the Carmel River Watershed, Monterey County, California*. Prepared for Carmel River Watershed Conservancy as part of the Carmel River Watershed Assessment and Action Plan. Monterey, CA.
- NOAA Fisheries (National Oceanic and Atmospheric Administration National Marine Fisheries Service). 2002. Instream Flow Needs for Steelhead in the Carmel River. Bypass Flow Recommendations for Water Supply Projects using Carmel River Waters. June. Santa Rosa, CA.
- Pacific Municipal Consultants. 2004. *Archaeological Investigations for the General Jim Moore Boulevard and Eucalyptus Road Improvement Project on*

- the Former Fort Ord, Monterey County, CA.* Report prepared for the Fort Ord Reuse Authority. Monterey, CA.
- Padre Associates, Inc. 2003. *Summary of Operations, Water Year 2002 Injection Testing, Santa Margarita Test Injection Well.* Prepared for Monterey Peninsula Water Management District. Ventura, CA.
- . 2004. *Summary of Operations: Water Year 2003 Injection Testing, Santa Margarita Test Injection Well.* Prepared for Monterey Peninsula Water Management District. Ventura, CA.
- . 2005. *Summary of Operations: Water Year 2004 Injection Testing, Santa Margarita Test Injection Well.* Prepared for Monterey Peninsula Water Management District. Ventura, CA.
- Peak, Ann S., and Associates. 1978. *Cultural Resources Assessment of the Monterey Regional Wastewater Treatment System, Monterey, California.* On file at the Northwest Information Center, Sonoma State University. Rohnert Park, CA.
- Petersen, M., D. Beeby, W. Bryant, C. Cao, C. Cramere, J. Davis, M. Reichle, G. Saucedo, S. Tan, G. Taylor, T. Topozada, J. Treiman, and C. Wills. 1999. *Seismic shaking hazard maps of California.* Sacramento, CA: California Division of Mines and Geology.
- RBF Consulting and Denise Duffy & Associates. 2003. *Marina Coast Water District Regional Urban Water Augmentation Project Engineering Feasibility Study.* August. Monterey, CA.
- Raines, Melton & Carella, Inc. 2002. *Plan B Project Report, A.97-03-052.* July. Prepared in association with EDAW, Inc. for the Water Division of the California Public Utilities Commission. Walnut Creek, CA.
- Randall, Judge Roger D. 2006. *Tentative decision, Monterey County Superior Court Case No. M66343, California American Water vs. City of Seaside et al.; issued January 12, 2006.*
- Remsen, J. V. 1978. *Bird Species of Special Concern in California: An Annotated List of Declining or Vulnerable Bird Species.* (Nongame Wildlife Investigations, Wildlife Management Branch alluvial report No. 78-1.) California Department of Fish and Game. Sacramento, CA.
- Reveal, J.L., and C. B. Hardham. 1989. *A revision of the annual species of Chorizanthe (Polygonaceae eriogonoidea).* *Phytologia.* 66(2):98-198.
- Rosenberg, L.I. 2001. *Geologic Resources and Constraints, Monterey County, California: A technical report for the Monterey County 21st Century General Plan Update Program.* Prepared for Monterey County Environmental Resource Policy Department. Salinas, CA.

- Sawyer, J. O., and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. Sacramento, CA: California Native Plant Society.
- Snider, W. M. 1983. *Reconnaissance of the Steelhead Resource of the Carmel River Drainage, Monterey County*. (Administrative Report 83-3.) Sacramento, CA: California Department of Fish and Game, Environmental Services Branch.
- Southern California Earthquake Data Center. 2003. Southern California Earthquake Data Center, Rinconada fault. March. Available: <<http://www.scecdc.scec.org/index.html>>. Accessed: July 3, 2003.
- Staal, Gardner and Dunne, Inc. 1987. *Hydrogeologic Investigation, Seaside Coastal Ground Water Basin*. Ventura, CA.
- . 1990. *Hydrogeologic Update, Seaside Coastal Ground Water Basins*. Ventura, CA.
- Stebbins, R. C. 1985. *A Field Guide to Western Reptiles and Amphibians*. 2nd edition. Boston, MA: Houghton Mifflin Company.
- . 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd edition. Boston, MA: Houghton Mifflin Company.
- Storer, T. 1925. A synopsis of the amphibian of California. *University of California Publications in Zoology* 27:1–342
- Swernoff, M. 1982. *A Reconnaissance Cultural Resources Survey of Fort Ord, California*. Professional Analysts. Prepared for U.S. Department of the Army, Sacramento Corps of Engineers. Sacramento, CA.
- Theis, C.V. 1935. Relationship Between Lowering of Piezometer Surface on the Fate and Duration of Discharge of a Well Using Ground Water Storage. *Transactions of the Geophysical Union* 16:519–524.
- U.S. Army Corps of Engineers, Sacramento District. 1992a. *Flora and Fauna Baseline Study of Fort Ord, California*. December. With technical assistance from Jones & Stokes Associates, Inc. (JSA 90-214.) Sacramento, CA.
- . 1992b. *Fort Ord Disposal and Reuse Environmental Impact Statement, Volume I: Draft*. December. With technical assistance from Jones & Stokes Associates, Inc. Sacramento, CA.

- . 1996. *Final Supplemental Environmental Impact Statement for Fort Ord Disposal and Reuse*. June. With technical assistance from Jones & Stokes Associates, Inc. Sacramento, CA.
- . 1997. *Installation-wide Multispecies Habitat Management Plan for Former Fort Ord, California*. April. With technical assistance from Jones & Stokes Associates, Inc. Sacramento, CA.
- U.S. Department of Agriculture, Soil Conservation Service. 1979. *Soil Survey of Monterey County, CA*. April.
- U.S. Fish and Wildlife Service. 1999. *Biological and Conference Opinion on the Closure and Reuse of Fort Ord, Monterey County, California*. (1-8-99-F/C-39R). March 30, 1999. Ventura, CA.
- . 2002a. *Biological Opinion on the Closure and Reuse of Fort Ord, Monterey County, California, as it Affects Monterey Spineflower Critical Habitat*. (1-8-01-F-70R). October 22, 2002. Ventura, CA.
- . 2002b. *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii)*. Portland, OR. viii + 173 pp.
- . 2005. *Cleanup and Reuse of Former Fort Ord, Monterey County, California, as it Affects California Tiger Salamander and Critical Habitat for Contra Costa Goldfields*. (1-8-04-F-25R). Ventura, CA. 14 March, 2005. Pp. 44 and 52.
- Weber T. and A. Peak. 1976. Site Record for CA-Mnt-699. On file at the Northwest Information Center, Sonoma State University. Rohnert Park, CA.
- Williams, D. F. 1986. *Mammalian Species of Special Concern in California*. (Wildlife Management Division Administrative Report 86-1.) Sacramento, CA: California Department of Fish and Game.
- WRIME, Inc. 2003. *Deep Aquifer Investigative Study*. May. Prepared for Marina Coast Water District, Marina California. Sacramento, CA.
- Yates, E., et al. 2005. *Seaside Groundwater Basin: Update on Water Resource Conditions*. Prepared for Monterey Peninsula Water Management District. Berkeley, CA.
- Zeiner, D. C., F. Laudenslayer, K. E. Mayer, and M. White. 1988. *Amphibians and Reptiles*. Volume I of *California Wildlife*. Sacramento, CA: California Department of Fish and Game.
- . 1990a. *Birds*. Volume II of *California Wildlife*. Sacramento, CA: California Department of Fish and Game.
- . 1990b. *Mammals*. Volume III of *California Wildlife*. Sacramento, CA: California Department of Fish and Game.

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Brennan, Janet. Supervising air quality planner. Monterey Bay Unified Air Pollution Control District, Monterey, CA. April 4, 2003—telephone conversation.

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