Decision 10-12-016 December 2, 2010

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of California-American Water Company (U210W) for a Certificate of Public Convenience and Necessity to Construct and Operate its Coastal Water Project to Resolve the Long-Term Water Supply Deficit in its Monterey District and to Recover All Present and Future Costs in Connection Therewith in Rates.	Application 04-09-019 (Filed September 20, 2004; Amended July 14, 2005)

DECISION APPROVING REGIONAL PROJECT, ADOPTING SETTLEMENT AGREEMENT AND ISSUING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR CALIFORNIA-AMERICAN WATER FACILITIES

TABLE OF CONTENTS

Title **Page**

DECISION APPROVING REGIONAL PROJECT, ADOPTING SETTLEMENT AGREEMENT, AND ISSUING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR CALIFORNIA-AMERICAN WATER FACILITIES 4
1. Summary 4
2. Overview of Today's Decision 7
3. Procedural Background 12
4. Scope of Issues in Phase 2 15
5. California-American Water Company's Monterey District 17
6. Constraints on Water Supply 18
6.1. Role of Other Agencies in Water Regulation on the Monterey Peninsula 21
7. Project Need 27
7.1. Impact of Cease and Desist Order 30
8. Environmental Review 34
8.1. Proposed Project and the Alternatives 35
8.1.1. Proposed Project per the PEA - Moss Landing Power Plant 37
8.1.2. North Marina Alternative 39
8.1.3. Regional Project, Phase 1 40
8.1.4. No Project Alternative 44
9. Findings of the Environmental Process 46
9.1. Significant and Unavoidable Environmental Impacts that Cannot be Mitigated 50
9.1.1. Greenhouse Gas Emissions 50
9.1.2. Air Quality 52
9.2. Cumulative Impacts 52
9.2.1. Air Quality 52
9.3. CEQA Findings of Facts 53
9.4. Statement of Overriding Considerations 54
10. Overview of Proposed Settlement Agreement 56
11. Water Purchase Agreement 62
11.1. Ownership and Cost Containment 62

TABLE OF CONTENTS
(Cont'd)

Title **Page**

11.2. Cost Recovery and Ratemaking Associated with Product Water Costs 68
11.2.1. Discussion: Cost Controls and Determination of Reasonable and Prudent Costs 75
11.3. Financing and Debt Equivalence 88
11.3.1. Discussion re: Financing and Debt Equivalence 93
11.4. Governance 98
11.4.1. Discussion: Governance and Ratepayer Protection 103
11.4.1.1. Status Reports 107
11.5. Water Supply, Water Delivery, Brackish Source Water Supply and Management 109
11.5.1. Discussion: Salinity, Slant Wells, and Vertical Wells 118
11.6. Operation and Maintenance Cost 121
11.6.1. Discussion: O&M Costs Should Be Considered in a Separate Phase of this Proceeding, or in a Successor Proceeding 122
12. Technical issues 122
12.1. Partial Second Pass and Boron 123
12.1.1. Discussion: Partial Second Pass and Boron 124
12.1.2. Pilot Test 126
12.1.2.1. Discussion: Pilot Test 127
12.1.3. Discussion: Sale of Excess Eater 128
13. Cal-Am Facilities 129
13.1. Discussion: Cal-Am Only Facilities 132
13.2. Proposed Ratemaking 135
13.2.1. Used and Useful Determination 135
13.2.2. Revenue Requirement Components 136
13.2.3. Discussion: Ratemaking for Product Water 140
13.2.4. Discussion: Ratemaking for Cal-Am Facilities 141
13.2.4.1. AFUDC for Cal-Am Facilities 141
13.2.4.2. Advice Letter Procedures 145
13.3. Additional Ratepayer Protections if the Regional Project is Not Approved 146
13.3.1. Discussion: Other Ratepayer Protections 149

TABLE OF CONTENTS
(Cont'd)

Title **Page**

14. Conclusion and Proposed Modifications 152
15. Comments of Proposed Decision 153
16. Assignment of Proceeding 156
Findings of Fact 156
Conclusions of Law 193
ORDER 203
APPENDIX A – List of Acronyms
APPENDIX B – CEQA Findings of Fact
APPENDIX C – Mitigation Monitoring and Reporting Program
APPENDIX D – Financing and Revenue Requirements
APPENDIX E – Service Lists

DECISION APPROVING REGIONAL PROJECT, ADOPTING SETTLEMENT AGREEMENT, AND ISSUING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR CALIFORNIA-AMERICAN WATER FACILITIES

1. Summary

California-American Water Company (Cal-Am) has applied for a Certificate of Public Convenience and Necessity (CPCN) seeking approval to enter into an agreement with various local government agencies designed to produce additional source water for the benefit of the Cal-Am ratepayer. This additional source water is needed to make up for water now taken illegally from the Carmel River, which taking, by order of the State Water Resources Control Board, must cease by December 31, 2016. This effort is known as the Coastal Water Project. Cal-Am is under order from the State Water Resources Control Board to cease diverting this water, determined in 1995 to be 10,730 acre feet of water per year. The utility must also replace 2,975 acre feet of water per year in allocations from the Seaside Basin.[1]

[1] The State Water Resources Control Board issued Order WR 95-10 in 1995 and Order 2009-0060 in 2009, which requires Cal-Am to undertake additional measures to reduce its diversions from the Carmel River and to terminate all such diversions no later than December 31, 2016. In 2006, the Monterey County Superior Court issued a final decision regarding adjudication of water rights of various parties who use groundwater from the Seaside Basin (*California American Water v. City of Seaside et al.* Case No. 66343).

By today's decision, we approve the proposed Settlement Agreement, as amended, that has been filed by Cal-Am, Marina Coast Water District, Monterey County Water Resources Agency, Monterey Water Regional Pollution Control Agency, the Surfrider Foundation, the Public Trust Alliance, and Citizens for Public Water (Settling Parties).[2] The Settlement Agreement proposes a public-private partnership, known as the Regional Project, to solve the long-standing water supply deficit on the Monterey Peninsula. We approve the Settlement Agreement and Implementing Agreements, and approve the Regional Project, as discussed below.

As proposed by the Settling Parties, Monterey County Water Resources Agency would own, construct, operate, and maintain the source water wells and raw water conveyance facilities to the desalination plant. Marina Coast Water District would own, construct, operate, and maintain the desalination plant and the product water conveyance facilities to the delivery point, which then becomes Cal-Am's intake point. Cal-Am would own, construct, operate, and maintain the pipeline, conveyance, and pumping facilities necessary to deliver the water to its customers. The Monterey Regional Water Pollution Control Authority would own, operate, and maintain the outfall for return of the brine to the sea.

In approving the modified Settlement Agreement and Water Purchase Agreement, we approve Cal-Am's participation in the Settlement Agreement and issue a CPCN to Cal-Am for the following components of the Regional Project: the transfer pipeline, the Seaside pipeline, the Monterey pipeline, including the

[2] We also refer to the Marin Coast Water District and Monterey County Water Resources Agency as the Public Agencies.

Valley Greens pump station, the Terminal Reservoirs, and the Aquifer Storage and Recovery facilities.

With the decision we adopt today, this Commission takes the highly unusual step of finding, after thorough review, that conditioned upon full compliance with the terms and conditions of the agreements and with the current law and practice which constrains the local agencies, there are sufficient procedural, contractual, and other legal safeguards contained in the parties' agreement, when taken together with the legal mandates imposed on Cal-Am's partner agencies under current law, to be reasonably certain to produce the lowest cost, viable, and timely solution to Cal-Am's immediate source water needs so as to provide adequate water for Cal-Am's ratepayers.

In so doing we are guided by the good faith engineering estimates provided by the parties, the committed willingness of the parties to work together according to the terms of the agreements to achieve the plan as outlined, and the results of extensive public vetting of the severity of the water problem and the widespread public support of the proposed solution. We recognize that even under the best case scenario, the revenue requirement for Cal-Am's Monterey District customers would increase by approximately 63%, as compared to the projected trend of the current revenue requirement.[3] Cost allocation and rate design related to the Coastal Water Project will be addressed in Phase 3 of this proceeding and will be coordinated with Cal-Am's current General Rate Case proceeding, Application (A.) 10-07-007.

---

[3] Our analysis of the revenue requirement increase is limited to the impact of the Regional Project only. The revenue requirement projections do not include any

Footnote continued on next page

We do not make this decision lightly but only after extensive review of the information supplied by the parties over many months, extensive discussion, and a thorough analysis of the agreements, the circumstances surrounding those agreements, vigorous public vetting, a review of the applicable law, and an assessment of the political and economic situation surrounding this application We recognize the pressing need for the Regional Project, as well as the historic alignment of the goals of virtually all parties and the residents and businesses on the Monterey Peninsula to ensure that a secure supply of water is available before severe water restrictions imposed by the State Water Resource Control Board's Cease and Desist Order are fully implemented in 2016.

2. Overview of Today's Decision

In Decision (D.) 09-12-017, issued on December 17, 2009, we certified the Final Environmental Impact Report (FEIR) as the environmental impact report for the Coastal Water Project.[4] The FEIR analyzed three water supply projects at an equal level of detail: the project proposed by California-American Water Company (Cal-Am or CAW) to be sited at the Moss Landing Power Plant; the North Marina Alternative, and the Regional Project. In compliance with the California Environmental Quality Act (CEQA), we certified the FEIR for use by

---

increases that may result from the Commission's consideration of A.10-07-007 or the pending application to remove the San Clemente Dam (A.10-09-018).

[4] The FEIR includes the Addendum to the FEIR, issued on March 24, 2010 to address errata in the text of the FEIR. None of the errata recommend any changes to the project or to the level of significance of impacts or to mitigation measures. The Addendum also presents and responds to seven additional comment letters that were inadvertently omitted from the published FEIR. None of the letters or responses have raised or identified any issues that would require changes to the FEIR as published.

the Commission and responsible agencies in considering approvals for the Coastal Water Project, or for portions thereof.

On April 7, 2010, Cal-Am, Marina Coast Water District (MCWD), Monterey County Water Resources Agency (MCWRA), Monterey Regional Water Pollution Control Agency (MRWPCA), Surfrider Foundation, Public Trust Alliance, and Citizens for Public Water (Settling Parties) filed a Motion to Approve Settlement Agreement.[5] The Motion attached the proposed Settlement Agreement and two Implementing Agreements, namely a Water Purchase Agreement (WPA) and an Outfall Agreement. The proposed Settlement Agreement and Implementing Agreements provide for the development, construction and operation of the Regional Project. As proposed by the Settling Parties, the costs of the Regional Project and the Water Purchase Agreement would be recovered from Cal-Am's Monterey District ratepayers who will benefit directly from its construction and operation. We distinguish here between Phase 1 of the Regional Project and the Regional Project facilities we approve today.[6] Phase 1 of the Regional Project is designed to supply 10,400 acre-feet of water per year (afy) to Cal-Am in a normal weather year and 12,500 afy in a critically dry weather year[7]. Conservation, water storage, and an existing desalination plant in Sand City are expected to supply 1,600 afy to Cal-Am. The Regional Project facilities we approve today include the

---

[5] Citizens for Public Water became a signatory to the Settlement Agreement on June 10, 2010.

[6] We provide additional detail regarding the distinction between Phase 1 of the Regional Project and Regional Project facilities we approve today in Section 8.1.3.

[7] An acre-foot of water, described as enough to cover an acre of land with one foot of water, is equivalent to 325,851 gallons of water.

desalination plant, source water wells, and the associated facilities, including those water transmission and distribution facilities to be owned by Cal-Am. In a normal weather year, 8,800 afy will be supplied from a new regional reverse osmosis desalination plant located in the Salinas Basin and served by new source water intake wells. The desalination plant will provide 10,900 acre-feet of water in a critically dry year.

The findings required by CEQA are attached as Appendix B and the Mitigation Monitoring and Reporting Program is attached as Appendix C. Consistent with Pub. Util. Code § 1002, we adopt the Regional Project as the approved Project. While we find that the Regional Project results in certain significant environmental impacts that cannot be mitigated, as we discuss below, we determine that there are substantial benefits that outweigh those impacts and which constitute overriding considerations under CEQA. We acknowledge the support of the community for the Regional Project, as expressed at the Public Participation Hearings (PPHs) held in June, 2010, and we also acknowledge the stated concerns regarding the anticipated and significant rate increases that will occur as a result of the Regional Project.

Monterey Peninsula residents and businesses have been struggling with water constraints since the 1940s. As detailed in Sections 6 and 7 of this decision, public and private interests have a long and contentious history of trying to find a viable solution to this problem. Conflicting community values have rendered other proposals unworkable and unachievable. We have been addressing these concerns at this Commission alone since 1997 – well over a decade. It is evident and timely that we must arrive at a supply-based solution and approve a project. No solution will be perfect or easy, but we are persuaded that approving the Settlement Agreement and Implementing Agreements will allow the Regional

Project to proceed. The structure adopted here provides a viable framework to begin addressing the water constraints on the Monterey Peninsula in a manner that will avoid the harshest strictures that could be imposed by the State Water Resources Control Board's (SWRCB) Order 2009-0060, also known as the Cease and Desist Order, issued on October 20, 2009.

Pursuant to Rule 12.1(d) of the Commission's Rules of Practice and Procedure, the Commission will not approve any settlement unless it is reasonable in light of the whole record, consistent with the law, and in the public interest. We find that the Settlement Agreement and the Water Purchase Agreement are reasonable and are in the public interest. We acknowledge the hard work and long hours from the signatories and non-signatories in the effort to reach settlement. We also acknowledge the competing considerations and concessions considered by the parties in arriving at the proposed Settlement Agreement and Water Purchase Agreement. We agree with the Settling Parties that time is of the essence. The Cease and Desist Order may well lead to water rationing and potentially severe economic constraints on the Monterey Peninsula.

Accordingly, we find that the Regional Project is a reasonable and fair solution to the water constraints on the Monterey Peninsula that will satisfy the Cease and Desist Order provisions and still provide protection for the Cal-Am ratepayers in the Monterey District.

We recognize the valid concerns that the Division of Ratepayer Advocates (DRA) has advocated, which comport with its statutory mission, as set forth in Pub. Util. Code § 309.5(a): "The goal of the division shall be to obtain the lowest possible rate for service consistent with reliable and safe service levels. For revenue allocation and rate design matters, the division shall primarily consider the

interests of residential and small commercial customers." In many rate cases, DRA concerns itself mainly with the rate implications in the current test year. This mission influences and informs DRA's analysis and recommendations. We consider DRA's position an important perspective in our deliberation of a proceeding, especially when, as is the case here, there will be a significant impact to ratepayers. However, this proceeding, unique in so many ways, extends beyond obtaining safe and reliable levels of water service at reasonable rates today. As we observed recently in Decision (D.) 10-08-008, "While it is DRA's mission to focus on costs and their impact on rates (footnote omitted), the Commission must consider the viability of the Coastal Water Project as a whole and the need for water on the Monterey Peninsula."[8] The Commission's broader mission means that we must look beyond a single rate cycle.

Unlike DRA, the Commission must consider and balance the viability of the project, and the interests of all ratepayers, the interests of the utilities. Indeed, this proceeding highlights the fact that there are competing interests and that the conflicts within the Monterey community have been long-standing. As this proceeding has evolved, parties have found common ground and common interests. We commend DRA for initiating the dialogue in the community with the Regional Plenary Oversight Group (REPOG) meetings that led to the development of the Regional Project.

During the pendency of this proceeding, the challenges and complexity of ensuring adequate water supply for the state as a whole have increased. We must therefore take into consideration the deeper implications of our decisions.

---

[8] D.10-08-008 at 17-18.

Among other things, compliance with environmental regulations, meeting water quality standards, and obtaining financing have added to the cost of proposed projects. At the same time, we must consider supply diversity, reliability, timeliness and feasibility of project completion.

In light of the above, we balance the objections raised by DRA and by the Monterey Peninsula Water Management District (MPWMD) against the need to ensure that the Regional Project can move forward in a timely way, reasonably-priced financing can be obtained, and in light of the widespread public support for this project which will help assure that this project is brought to completion along the lines outlined in these agreements. We also note that the historic nature of the partnerships that have come together across the county will contribute to assure that these long standing water issues can be resolved. As the Settling Parties have agreed, we require Cal-Am to submit regular status reports on the permitting, financing, design, bidding, and construction of the Regional Water Project to the Director of DWA. We also require Cal-Am to meet quarterly with DRA and DWA staff. No modification is required to effectuate this requirement. We also require Cal-Am to submit regular filings as to the adequacy of the water received and any issues with respect to adequate ratepayer representation, and a filing in five years regarding the water allocation it receives.

3. Procedural Background

The complex procedural history for this proceeding was set forth in D.09-12-017. Since the issuance of the Scoping Memo Ruling in Phase 2, parties have been negotiating a collective solution to ameliorating the water supply problems on the Monterey Peninsula. After a series of productive Alternative Dispute Resolution (ADR) sessions and several formal status conferences, on

April 7, 2010, the Settling Parties jointly filed and served a Motion to Approve Settlement Agreement that recommended approval of the Regional Project. As contemplated by the Settling Parties, the proposed Settlement Agreement and attached Implementing Agreements resolve all issues in Phase 2 of this proceeding.[9] On June 10, 2010, Citizens for Public Water became a signatory to the proposed Settlement Agreement.

DRA, MPWMD, and Citizens for Public Water timely filed and served comments, objecting to the proposed Settlement Agreement on several grounds, and proposed several modifications to the Settlement Agreement and the WPA. DRA supports the Regional Project but has raised significant concerns about the costs and accountability of the Settlement Agreement and the WPA. DRA makes the following recommendations:

1. Establish a firm cost cap of $2,200 per-acre-foot on the facilities associated with the source wells and the desalination plant;
2. Require MCWD to pay a share of the Regional Project, which DRA establishes at 16.2% of costs and eliminate the ceiling on fees from new connections that MCWD will contribute to the Regional Project;
3. Require the intake wells to be slant wells unless they are found to be infeasible in testing;
4. Require pilot testing and contingency planning;
5. Do not require Cal-Am ratepayers to pay for a second pass using reverse osmosis technology;

[9] The Settling Parties anticipate that Cal-Am will file an application at the Commission to address the issue of Cal-Am's long-term financial obligations for this Project and its impact on Cal-Am's financial viability.

6. Ensure that any unallocated water will become the property of Cal-Am;
7. Ensure that MPWMD and the Monterey Peninsula Cities become an effective part of the governance of the Regional Project;
8. Require that O&M costs of the desalination plant be examined in a future phase of this proceeding;
9. Adopt a cost cap for the Cal-Am only facilities of $86.6 million; and
10. Modify the ratemaking proposals in the Settlement Agreement to provide effective ratepayer protection.

MPWMD has similar concerns regarding financing, fairness, governance and protection for Cal-Am ratepayers. In addition to cost issues, MPWMD adamantly declares that it requires a fully participatory seat on the Advisory Committee and asserts that decision-making by the Advisory Committee must be subject to public meeting and Public Records Act protocols. We examine each of these recommendations below.

Cost workshops were convened on May 10 and 11, 2010, and evidentiary hearings were held on June 8 - 11, 2010. PPHs were held in Monterey and in Seaside on June 28 and 29, 2010. Parties filed and served concurrent opening briefs on July 2 and concurrent reply briefs on July 16, 2010. The proceeding was submitted upon the filing of concurrent opening and reply comments regarding proposed changes to the make-up of the proposed Advisory Committee (§ 6 of the Water Purchase Agreement) on July 28 and August 4, 2010, respectively. Oral

argument was convened before Commissioner Bohn and ALJ Minkin on November 10, 2010.[10]

4. Scope of Issues in Phase 2

The focus of Phase 2 is the selection of a long-term water supply solution to address the water shortfall for the Monterey District in order to meet the needs of Cal-Am's customers, and to explore a regional alternative to Cal-Am's Coastal Water Project, as directed in D.03-09-022.[11] Phase 2 has considered how the widely-recognized need may best be met by various water supply alternatives, as evaluated according to the statutory framework established by Pub. Util. Code § 1001 *et seq.*

Cal-Am may not proceed with the Coastal Water Project absent certification by the Commission that the present or future public convenience and necessity require it. As a basis for granting such certification, the Commission must consider the need for the project, as well as community values, recreational and park areas, historical and aesthetic values, and the influence on the environment. (Pub. Util. Code § 1002(a).)

The review process established by CEQA is the primary vehicle for the environmental review. CEQA requires the lead agency (the Commission in this case, as determined in D.03-09-022) to conduct a review to identify environmental impacts of the project, and ways to avoid or reduce

---

[10] The date for oral argument was changed in response to MCWD's motion filed on October 26, 2010. The ALJ granted the request for the change in date but denied the request to convene final oral argument before a quorum of the Commission. We note that no party requested final oral argument in their opening briefs, as was set forth in the Scoping Memo Ruling issued on March 26, 2009. We affirm the ALJ's electronic ruling here.

[11] D.03-09-022, at 12.

environmental damage (through mitigation measures or project alternatives), for consideration in the determination of whether to approve the project or a project alternative. CEQA precludes the lead agency from approving a proposed project or project alternative unless that agency requires changes or alternatives in the project to eliminate or substantially lessen all significant effects on the environment where feasible, and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations.

An environmental impact report (EIR) is an informational document to inform the Commission, responsible and trustee agencies, and the public in general, of the environmental impacts of the proposed project and alternatives, design a recommended mitigation program to reduce any potentially significant impacts, and identify, from an environmental perspective, the preferred alternative. CEQA requires that, prior to approving the project or a project alternative, the lead agency must certify that the EIR was completed in compliance with CEQA, that it reviewed and considered the EIR prior to approving the project or a project alternative, and that the EIR reflects the agency's independent judgment. (Pub. Res. Code § 21082.1(c)(3), CEQA Guidelines § 15090.) Here, the final EIR was certified by the Commission in D.09-12-017.

In Phase 2, we also address accounting and ratemaking issues associated with Construction Work in Progress and Allowance for Funds Used during Construction, as well as a review of the need for the Special Request 2 Surcharge described in D.06-12-040.[12] We have considered various approaches to financing

[12] We recognize that D.06-12-040 may be modified as a result of this review. The Scoping Memo Ruling issued on March 26, 2009 provided notice to the parties of this

Footnote continued on next page

and ownership of the proposed Project and alternatives. Finally, we have considered the timeline for the Project and the alternatives. Since Cal-Am must comply with SWRCB Order 95-10, the SWRCB Cease and Desist Order, and the Seaside Groundwater Adjudication guidelines, it is important to understand the timing for permitting and construction of the Project and alternatives.

The Commission does not have jurisdiction over water rights, and we certainly do not intend to interfere with the various state or local agencies' jurisdiction. However, to the extent that information on water rights and jurisdiction can inform our understanding of the proposed Project and alternatives, and how ownership and financing might be implemented, then we have appropriately considered these issues. As the assigned Commissioner and ALJ have determined, any other consideration of water rights and jurisdictional issues is properly outside the scope of Phase 2.

5. California-American Water Company's Monterey District

Cal-Am is a Class A investor-owned water utility, regulated by this Commission. Its Monterey District serves most of the Monterey Peninsula, including Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, as well as the unincorporated areas of Carmel Highlands, Carmel Valley, Pebble Beach, and the Del Monte Forest.

Cal-Am supplies the Monterey District with surface water and groundwater from the Carmel River System and the coastal subarea of the Seaside Groundwater Basin (also known as the Seaside Basin). Cal-Am also

---

possibility. Cal-Am filed its petition for modification on April 22, 2010, and DRA timely filed its response on May 24, 2010. That petition for modification will be addressed in a separate decision.

operates three small independent water systems along the Highway 68 corridor east of Monterey that draw water from the Laguna Seca subarea of the Seaside Basin.

Water supply has long been constrained due to frequent drought conditions on the semi-arid Monterey Peninsula, which obtains its water supply solely from rainfall. In addition, as described in the FEIR, seawater intrusion and excess diversion have existed for decades, first identified in the late 1930s and documented by the State of California in 1946.[13]

There have been several disputed attempts to solve the water issues on the Monterey Peninsula, as we discuss below.

6. Constraints on Water Supply

Cal-Am has owned and operated the San Clemente Dam and the Los Padres Dam since 1965. As described in the FEIR, the San Clemente Dam was constructed on the Carmel River in 1921 and is the major point of surface water diversion from the river. The Los Padres Dam was constructed in 1949. Sedimentation reduced the usable storage at both reservoirs over the years, such that by 1995, the primary source of water supply for Cal-Am was multiple wells located along the lower Carmel River. These wells supplied approximately 70 percent of Cal-Am's demand, with the balance of supply provided by storage at the Los Padres Reservoir, diversions from the San Clemente reservoir, and water pumped from the Seaside Basin. Cal-Am's main distribution system also includes eight wells in the Coastal subarea of the Seaside Basin. In addition, Cal-Am owns nine wells in the Laguna Seca subarea, which serve the three independent water systems along Highway 68 described above.

According to the FEIR, as of 1995, Cal-Am served approximately 105,000 customers in its Monterey District, supplying them with approximately 17,000 afy.[14] Of this amount, approximately 14,106 afy was supplied from the Carmel River system and 2,700 afy was supplied from the Seaside Basin.[15]

In 1995, the SWRCB issued its Order No. WR 95-10 (Order 95-10). The SWRCB concluded that although Cal-Am had been diverting 14,106 afy from the Carmel River, it has a legal right to only 3,376 afy from the Carmel River system, including surface water and water pumped from the Carmel Valley wells. Thus, SWRCB ordered Cal-Am to replace what SWRCB determined to be unlawful diversions of 10,730 afy from the Carmel River with other sources and through other actions, such as conservation to offset 20 percent of demand.

In 2006, the Monterey County Superior Court issued a final decision regarding adjudication of water rights of various parties who use groundwater from the Seaside Basin. (*California American Water v. City of Seaside et al.*, Case No. 66343). The court's decision established physical limitations to various users' water allocations to reduce the drawdown of the aquifer and prevent additional seawater intrusion and set up a Watermaster to administer and enforce the Court's decision. Cal-Am is currently allocated 3,504 afy from the Coastal subarea of the Seaside Basin and 345 afy from the Laguna Seca subareas. These allocations will be reduced over time until they eventually reach 1,474 afy

---

[13] FEIR at 5-1.

[14] The Commission generally refers to the number of metered connections rather than the number of persons served. In D.09-07-021, we refer to approximately 39,000 connections in Cal-Am's Monterey District. (Appendix B at 7.)

[15] FEIR at 2-5.

from the overall Seaside Basin. Prior to the Seaside Basin adjudication, Cal-Am's allocation for the Coastal subarea was 4,000 afy.

Cal-Am developed its Proponent's Environmental Assessment assuming that 10,730 afy of replacement water supply would be required to comply with Order 95-10 and that 1,000 afy of replacement water supply would be required for the Seaside Basin adjudication, for a total of 11,730 afy in replacement supply. In 2006, the MPWMD issued a technical memorandum, updating the demand in Cal-Am's service territory. In sum, the replacement water supply required to meet total updated demand is 12,500 afy, as shown in the following table:[16]

Replacement Amount	**Source to be Replaced**
8,498 afy	To replace diversions from Carmel River sources
2,975 afy	To replace allocations from overall Seaside Basin
762 afy	To replace supply from Los Padres Reservoir, due to continuing sedimentation
272 afy	To account for replacement of water from non Cal-Am production from Seaside Basin

The environmental documents were developed to assess and analyze the environmental impacts of replacing 12,500 afy of long-term water supply on the Monterey Peninsula, as we discuss further below.

In addition to water supply constraints, the Carmel River provides a habitat for the California red-legged frog and the South Central California Coast steelhead trout. The red-legged frog was listed as threatened under the Federal

[16] Based on FEIR, Table 2-2 at 2-7; total replacement supply is 12,507 afy, rounded to 12,500 afy.

Endangered Species Act in 1996 and Cal-Am is subject to prosecution for a "take" of the frog.[17] In 1997, Cal-Am entered into an agreement with the U.S. Fish and Wildlife Service (USFWS) to regulate its well production to avoid or mitigate impacts on the red-legged frog. These agreements have been renewed several times.

In 1997, the steelhead was listed as threatened under the Endangered Species Act, and Cal-Am is subject to prosecution by the National Oceanic and Atmospheric Administration (NOAA) Fisheries. Both the USFWS and NOAA Fisheries contend that any entity that pumps water from the Carmel Valley Aquifer may be liable for a "take" because such pumping may alter the riparian habitat, affect the steelhead's ability to migrate, and affect the red-legged frog's ability to mature. Cal-Am has entered into a Conservation Agreement with NOAA Fisheries, with the long-term goal of procuring an alternative water supply source to reduce withdrawals from the Carmel Valley Aquifer. According to the FEIR, should the federal agencies prosecute Cal-Am for "takes," enforcement actions could include further reduction of the water supply and heavy fines.[18]

6.1. Role of Other Agencies in Water Regulation on the Monterey Peninsula

In addition to this Commission, many federal, state, and local agencies are involved in the regulation of water, water rights, and water supply on the Monterey Peninsula. These agencies include, but are not limited to the State

---

[17] The Endangered Species Act, § 9 defines a "take" as harm to a listed species of wildlife. Harm includes habitat alteration, according to USFWS regulations.

[18] FEIR at 1-9.

Water Resource Control Board, Monterey Peninsula Water Management District, Marina Coast Water District, Monterey County Water Resources Agency, Monterey Regional Water Pollution Control Agency, the Monterey Regional Waste Management District, and the Seaside Groundwater Basin Watermaster. Marina Coast Water District, Monterey County Water Resources Agency, Monterey Regional Water Pollution Control Agency, and Monterey Peninsula Water Management District have actively participated as parties in this proceeding. We provide a brief background on the active parties which play an important role in the public-private partnership we approve today.

As set forth in Exhibit 329, the Marina Coast Water District (MCWD) was organized in 1960 and operates in accordance with the County Water District Law (Water Code §§ 30000 et seq.). MCWD is governed by five directors elected at-large from within MCWD's jurisdictional boundaries. MCWD's service territory is north of and adjacent to Cal-Am's service territory in the Monterey Peninsula. MCWD provides water and sewer service to the City of Marina and the former Fort Ord community. MCWD also has agreements to annex certain other property, including the Armstrong Ranch, where the desalination plant is proposed to be located.[19]

The Monterey County Water Resource Agency (MCWRA) is a public agency, which was created by the Monterey County Water Resources Agency Act (Agency Act), as codified in Chapter 52 in the California Water Code Appendix.[20] MCWRA's jurisdiction covers the Territory of Monterey County

---

[19] Exhibit 329 at 15-16, Exhibit 357.

[20] Exhibit 500 at 3; Monterey County Water Resources Agency Act (1990 Stats. 1159, 1991 Stats. 1130, 1993 Stats. 234, and 1994 Stats. 803). MCWRA is the successor to the

Footnote continued on next page

that lies within the Monterey County exterior boundaries. The Monterey County Board of Supervisors is ex officio the Board of Supervisors of MCWRA. The Board of Supervisors appoints a nine-member Board of Directors for MCWRA. Each of the five supervisors of Monterey County appoints one director and the other four are appointed by majority vote of the supervisors from nominees submitted by various agricultural groups.

The Agency Act requires MCWRA:

> to provide for the control of flood and storm waters of the Agency, to conserve those waters for beneficial and useful purposes by spreading, storing, retaining, and causing those waters to percolate into the soil with the Agency, or to save and conserve in any manner all or any of those waters, and to increase and prevent the waste or diminution of the water supply in the Agency, including the control of groundwater extractions as required to prevent or deter the loss of usable groundwater through intrusion of seawater and the replacement of groundwater so controlled through the development and distribution of a substitute surface supply.[21]

Most pertinent to our decision today is the mandate that no groundwater from the Salinas Basin "may be exported for any use outside the basin, except that use of water from the basin on any part of Fort Ord shall not be deemed such an export. If any export of water from the basin is attempted, the Agency

---

Monterey County Flood Control and Water Conservation District under the Monterey County Flood Control and Water Conservation District Act, repealed in 1990 (Ch. 699, stats. 1947).

[21] Exhibit 500 at 5, citing Agency Act at § 52-8.

may obtain from the superior court, and the court shall grant, injunctive relief prohibiting that exportation of groundwater."[22]

The Monterey Regional Water Pollution Control Agency (MRWPCA) operates the regional wastewater treatment plant located north of Marina and also operates the regional recycling treatment plant located at the same facility. Under contract to MCWRA, MRWPCA distributes recycled water to agricultural customers for irrigation on 12,000 acres in Castroville. This recycled water has been paid for by the agricultural customers in the Salinas Valley and is known as the Castroville Seawater Intrusion Program (CSIP). As explained on the MRWPCA's website, the MCWRA and the MRWPCA have partnered for years to provide recycled water to farmers in order to reduce the draw of water from underground aquifers.[23] MRWPCA is governed by a Board of Directors, consisting of a Monterey County Supervisor, a director of the MCWD, mayors and city council members of various cities served by the MRWPCA, and members of various sanitation districts.

Also, as explained in Exhibit 306, the Monterey Regional Waste Management District (MRWMD) operates the solid waste management facilities adjacent to the proposed Regional Project. In conjunction with the MPWPCA, the MRWMD captures landfill gas and uses it as fuel in an existing cogeneration facility. Pursuant to Pub. Util. Code § 218, because power generators may sell power directly to adjacent end users, MCWD states that MRWMD could sell

---

[22] *Id*. at 4-5, citing Agency Act at § 52-21.

[23] http://www.mrwpca.org/recycling/index.php.

renewable power to the Regional desalination plant and thus, reduce energy costs.[24]

We discussed the formation of the Monterey Peninsula Water Management District (MPWMD) in D.09-07-021:

> In 1977, the Legislature created the Management District for the purposes of: "conserving and augmenting the supplies by integrated management of ground and surface water supplies, for control and conservation of storm and wastewater, and for the promotion of the reuse and reclamation of water." The Management District's specific functions are "management and regulation of the use, reuse, reclamation, conservation of water and bond financing of public works projects." The Management District is authorized to issue bonds, assess charges for groundwater enhancement facilities, levy assessments on real property and improvements, and "fix, revise, and collect rates and charges for the services, facilities, or water furnished by it."[25]

MPWMD is governed by a seven member board of directors. Five of the directors are elected directly, one member is an elected Monterey County Supervisor, and one member is a member, councilmember, or city manager appointed by the mayors of the six cities within the boundaries of the MPWMD:

---

[24] Exhibit 306 at 21-23. DRA contends that we must not rely on this information, since it is not included in the Settlement Agreement or the WPA and also asserts that we cannot rely on MCWD's Opening Brief regarding the potential for use of renewable energy. We do not rely on the fact that such endeavors will occur, but we encourage Settling Parties to investigate feasible uses of alternative energy supplies to reduce costs. We note that the FEIR also considers the possible use of renewable energy for the Regional Project at 5-45.

[25] D.09-07-021 at 117, footnotes omitted.

Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside.[26]

Water is a critical issue on the Monterey Peninsula, and the community is very aware and informed about water issues. Even with this brief overview, we can see that the agencies charged with managing water resources have inter-related missions and, to a certain extent, overlapping supervisory boards. We are cognizant of the views expressed at the PPHs in July 2009 and June 2010. Residents, business owners, newly-formed coalitions, and political leaders are fully aware of the need for developing a new water source quickly, the need for cost-effectiveness, and the need for ratepayer protection. It is clear that the community actively desires a role in the Regional Project, but is divided on whether the Public Agencies can provide the protection they seek.[27] Indeed, several speakers at the PPHs stated that local agencies alone have not been able to solve the problem and entreated the Commission to intervene.

---

[26] As explained in its Opening Brief, MPWMD boundaries also include the Monterey Peninsula Airport District, portions of unincorporated Monterey County, Pebble Beach, Carmel Highlands, and along the Highway 68 corridor. Opening Brief at 5.

[27] RT Volumes 16 and 17 (transcripts of the June 28, and 29, 2010 PPHs).

7. Project Need

Given this history, no party disputes that there is an urgent need to find an alternative water supply to replace Cal-Am's water supplies that are drawn from the Carmel River, in order to ensure that Cal-Am complies with SWRCB Order 95-10, the Seaside Basin adjudication, and the SWRCB Cease and Desist Order. We concur. Based on the long-running constraints on water supply on the Monterey Peninsula, there is little doubt that there is a need for additional water supply, over and above any water savings that can be accomplished through conservation, use of recycled water, or prohibition of potable water for landscape irrigation.

The Monterey Peninsula has been struggling to find solutions to the water supply deficit for decades.. We emphasize the history to provide a context for our decision to reach outside the usual procedure and to approve a costly desalination project as a reasonable solution. The severity and immediacy of the problem requires such an approach. We heard clearly from residents and business-owners that inaction at this point is unacceptable.[28] There have been opportunities to move forward, but these have not been successful. For example, MPWMD proposed to build the New Los Padres Dam and Reservoir in 1989 and secured the required environmental documentation and permits. In November, 1995, the voters failed to pass a measure that would authorize funding of the New Los Padres Dam and Reservoir.

In 1996, Cal-Am filed Application (A.) 97-03-052, which proposed to construct a smaller dam and reservoir (the Carmel River Dam and Reservoir Project) that would have been operated to serve only existing community needs.

MPWMD prepared a Supplemental EIR in 1998, building from the EIR certified for use in constructing the New Los Padres Dam and Reservoir. However, in 1998, Assembly Bill (AB) 1182 (Stats. 1998, Ch. 797) was enacted, which effectively halted the completion of the final environmental documents and ordered this Commission to identify an alternative to the dam.

In 2002, the Commission completed a water supply contingency plan, known as "Plan B," which concluded that a combination of desalination and aquifer storage and recovery could produce 10,730 afy. Cal-Am determined that the Carmel River Dam was no longer a viable project and, in 2004, filed the instant application, which was amended in 2005.

We concur that additional long-term water supplies are required to meet the pressing legal constraints on water supply on the Monterey Peninsula, and find that there is a pressing need for the Coastal Water Project.

As Cal-Am explains, once the Coastal Water Project is online, Cal-Am generally plans to utilize the majority of its Carmel River right to provide a base supply for the system during the winter. The Seaside groundwater allocation would provide a base supply in the summer. Excess Carmel River water and desalinated water would be injected and stored in the Seaside Basin Aquifer Storage and Recovery system in the winter for extraction during the summer to meet summer average and peak day demands. Desalinated water would be used to supplement remaining demand.[29]

We must squarely recognize that, while there is a pressing need for a reliable long-term water supply on the Monterey Peninsula, desalinated water is

---

[28] RT at 1843, for example.

extremely expensive, both in terms of capital costs and in terms of ongoing operations and maintenance costs. While we approve Cal-Am's participation in the Regional Project by today's decision, we continue to encourage parties to search for all possible water supplies that can reduce the need for desalinated water, as the additional components of the Regional Project, Phase 2 are studied and analyzed.

We have previously ordered Cal-Am to reduce leaks and to carefully account for previously-unaccounted for water.[30] We must also encourage creative approaches to meeting potable water needs. For example, we addressed Cal-Am's Monterey District Summer Maximum Day Demand in D.09-07-021:

> We agree with Cal-Am's Study that reducing or prohibiting the use of potable water for outdoor landscape irrigation during peak demand periods is a reasonable means of addressing short-term supply limitations. Unlike residential and commercial consumption or sanitary uses, outdoor landscape irrigation does not require potable water, and reclaimed and other forms of non-potable water are common substitutes. We conclude, therefore, that use of potable water for outdoor irrigation is not entitled to the high standard of reliability we require for residential and commercial consumption and sanitary uses. We observe, as well, that outdoor landscape irrigation may play a large role in bringing the system to maximum Daily Demand. (Footnote omitted.)
>
> As American Water recognized in its capacity additions strategy . . . developing a program to implement a lower standard of availability for outdoor irrigation will require significant work with customers to address numerous issues. Because most residential and commercial customers do not

---

[29] Exhibit 104 at 26.

[30] D.09-07-021 at 155-156.

> have separately metered landscape irrigation, among the issues requiring resolution is creating an efficient and feasible means to timely initiate and enforce landscape irrigation prohibitions.[31]

D.09-07-021 also removed the lot size and seasonal discounts from Cal-Am's rate design scheme and therefore customers are, appropriately, no longer insulated from the high cost of outdoor irrigation. We have approved Advice Letter 832-A to implement an Emergency Interruption Program, whereby large landscape irrigation system use would be curtailed voluntarily or by Cal-Am physically turning off the dedicated irrigation water meters, most likely during the peak watering month of July. The highest use dedicated irrigation meters serve two golf courses, parks, a cemetery, and sports fields. While we recognize that there are technical and legal issues to contend with, we continue to encourage Cal-Am to explore the use of non-potable water to serve these customers, as directed in D.09-07-021.[32]

7.1. Impact of Cease and Desist Order

The timing associated with water supply constraints has become particularly critical with the issuance of the SWRCB's Cease and Desist Order. On July 27, 2009, the SWRCB issued a Draft Cease and Desist Order that orders Cal-Am to undertake additional measures to cease its unauthorized diversions from the Carmel River. After considering written comments and public testimony, the SWRCB issued a revised Draft Cease and Desist Order on September 16, 2009. The SWRCB issued its Cease and Desist Order on October 20, 2009 (Order WR 2009-0060), which requires Cal-Am to undertake

---

[31] D.09-07-021 at 20-21.

[32] Id. at 131 – 132.

additional measures to reduce its diversions from the Carmel River and to terminate all such diversions no later than December 31, 2016. A court order temporarily stayed the Cease and Desist Order, but the Superior Court of Santa Clara County lifted the stay on April 22, 2010.

On May 7, 2010, Cal-Am moved to request official notice of both the SWRCB's Order WR 2009-0060 and the Superior Court's Order dissolving the stay. No party has objected to this motion, and, pursuant to Rule 13.9, which provides that "[o]fficial notice may be taken of such matters as may be judicially noticed by the courts of the State of California pursuant to Evidence Code section 450 et seq.," we hereby grant Cal-Am's request for official notice.

The Cease and Desist Order states in no uncertain terms that Cal-Am can and must reduce its unlawful diversions from the Carmel River without further delay. The SWRCB presents a range of options for Cal-Am to begin complying immediately with the Cease and Desist Order, including reducing its system losses by 549 afy, anticipating that approximately 41 afy of additional savings can be obtained as properties are retrofitted and conservation measures are installed, reducing use of potable water for outdoor irrigation by approximately 12 afy, imposing additional water demand management programs (in conjunction with MPWMD), and prohibiting new service connections.[33]

Based on the mandatory cumulative annual reductions, the estimated operational yield from the Aquifer Storage and Recovery (ASR) project, the estimated afy supplied by the Sand City desalination plant, and the estimated Coastal Water Project output, the Cease and Desist Order finds that the total

[33] Cal-Am has filed A.10-05-020 to implement proposed moratoria on new connections.

amount diverted from the Carmel River must not exceed Cal-Am's water rights of 3,376 afy by the 2016-17 water year.[34]

Permitting and building the approved desalination plant and associated infrastructure will take a significant amount of time.[35] We agree with the Settling Parties: it is reasonable to approve the Regional Project without delay in order to ensure that the required water supply is available to the Monterey Peninsula by the 2016-17 water year, as required by the SWRCB. There is no reason to believe that the Cease and Desist Order will be lifted or softened over time.

7.2. Need for Cal-Am to Provide Water at Reasonable Price

This Commission has an obligation to assure that Cal-Am can provide "adequate" water to the citizens of Monterey at a "reasonable" price. What constitutes "adequate" is within our purview, as is the determination as to what is a "reasonable" price. In determining what is "adequate", we are constrained by the Cease and Desist Order. Under the Order, Cal-Am must reduce its unlawful diversions of water from the Carmel River annually and terminate all unlawful diversions by no later than December 31, 2016. This would mean a reduction of over 7,000 afy, leaving 3,376 afy effective January 1, 2017. Without additional sources to make up the difference, severe rationing will need to be imposed and the economy of the Monterey Peninsula will be severely impacted. At this time, there are no possible sufficient other sources of water available,

---

[34] SWRCB Order 2009-0060, Attachment 1 at 64. A water year is calculated from October to September.

[35] FEIR at 5-40.

even with mandated conservation efforts, within the timeframe imposed by the State Water Resources Control Board.

The Commission, therefore, must balance the cost burden contemplated on Cal-Am ratepayers from the construction of the Regional Project, generally regarded as the only feasible project with the likelihood being completed within the time limit imposed by the State Water Resources Control Board, with the burden on those same ratepayers if no alternative source of water is produced. It is undisputed that the situation resulting from the Cease and Desist Order is not sustainable in that it is not sufficient to meet even current needs.

In this decision, the Commission must decide what is a "reasonable" cost burden to inflict on Cal-Am ratepayers, under what conditions such a cost can be undertaken, and how the cost can be controlled such that an appropriate balance can be achieved. Given that the projected supply of water is "inadequate" and the consequences of no project severe, we are forced to look at what may be "reasonable" in an expanded way. By the same token, however, we must not burden ratepayers with such a cost as to be prohibitive or destructive. There is a limit beyond which the contemplated cost is simply too great and even badly constrained water supplies must be deemed adequate. Cal-Am can be required to do its part, but not whatever is asked of it.

The water problems on the Monterey Peninsula are long-standing, contentious, and bitterly disputed by many parties and interests. They result from a continuing conflict of community values that is decades-long, and which have rendered earlier possible solutions unachievable. The proposed solution is more expensive and complex than would have been the case if the various interests could have taken a wider view of community interests at an earlier stage. It is not this Commission's obligation to solve Monterey Peninsula water

problems. It is also not our role to question whether the Cease and Desist Order is the "correct" resolution of the issues or to otherwise question the basis of that decision. Our role is to consider and decide what Cal-Am ratepayers can reasonably be asked to do to produce a solution to their own supply shortfall. Until this Commission approves the course of action proposed by Cal-Am, it cannot go forward.

Several of the parties have commented on the threat of litigation. Unfortunately, this Commission cannot by its actions obviate that threat. We do not have an all-party settlement, and the history of Monterey and water is replete with litigation and threats of litigation. We must, however, do our best to balance the proposed solution, the need and the community interests.

Finally, we recognize that this Commission's jurisdiction does not extend to the regulation of other governmental agencies. We can and do, however, have broad powers to condition the actions and commitments of Cal-Am, and can take into account the legal and constitutional processes and duties of other agencies of government, such as we do in the case of the Department of Public Health and the California Energy Commission. Thus, we look to these processes and duties to ensure that Cal-Am's provision of water to its ratepayers on the Monterey Peninsula through the Regional Project is achieved at a reasonable cost in light of these competing interests.

8. Environmental Review

D.03-09-022, issued in A.97-03-052, designated the Commission as the lead agency for environmental review of the Coastal Water Project. Cal-Am's proposal to build, own, and operate the Coastal Water Project is subject to

environmental review under CEQA.[36] The CEQA review evaluates the proposed project and other alternatives that can address the water supply situation, as well as a no project alternative.

Pursuant to its usual practice, the Commission retained outside consultants to prepare the DEIR and FEIR for the proposed project and alternatives. The Commission's Energy Division Staff managed the environmental review process. As discussed in D.09-12-017, the process of preparing the DEIR and FEIR included numerous opportunities for public involvement which were designed to maximize agency and public input for the Coastal Water Project environmental review process.

We concluded in D.09-12-017 that the FEIR for the Coastal Water Project complied with CEQA, and found that the FEIR is the competent and comprehensive informational tool that CEQA requires it to be. We therefore determined that the FEIR was completed in compliance with CEQA; that the FEIR has been presented to the Commissioners (the decision-making body of the Commission), and has been reviewed, considered, and applied prior to action on the project; and that the FEIR reflects the Commission's independent judgment and analysis. Accordingly, the Commission certified the FEIR on December 17, 2009 in D.09-12-017.

8.1. Proposed Project and the Alternatives

As described in the FEIR, the Coastal Water Project proposal and alternatives are the result of a multi-year planning effort that has included the analysis and consideration of several alternatives in the context of several

[36] The CEQA statute appears at Cal. Pub. Res. Code §§ 21000 et seq.

different proposed projects and related documents. The project objectives are as follows:

1. Satisfy Cal-Am's obligations to meet the requirements of SWRCB Order 95-10;
2. Diversify and create a reliable drought-proof water supply;
3. Protect the Seaside basin for long-term reliability;
4. Protect listed species in the riparian and aquatic habitat below San Clemente Dam;
5. Protect the local economy from the effects of an uncertain water supply;
6. Minimize water rate increases by creating a diversified water supply portfolio;
7. Minimize energy requirements and greenhouse gas emissions per unit of water delivered to the extent possible;
8. Explore opportunities for regional partnerships, consistent with D.03-09-022; and
9. Avoid duplicative facilities and infrastructure.[37]

The FEIR sets forth three water supply projects that have been analyzed at an equal level of detail, each of which can satisfy the objectives described above. As described in the FEIR, while each of the three projects would provide the majority of water required, none of the three projects that are analyzed would meet total demand on their own. There are certain other project components and measures that are assumed to be operational under all of the alternatives studied in the FEIR.

[37] FEIR at ES-2, ES-3. The last three objectives were developed by Staff during the process of compiling the EIR.

In addition to the three project options described below, the FEIR analyzes several other alternatives to the project, as well as multiple alternatives "of the project," i.e., alternatives to select elements or locations of the project.

8.1.1. Proposed Project per the PEA - Moss Landing Power Plant

As described in D.09-12-017, the Moss Landing Project would be sited on 16 acres at the Moss Landing Power Plant and would be owned and operated by Cal-Am. The proposed project includes a desalination plant sized to produce 10 million gallons per day (mgd) of desalinated water. The proposed project also includes a seawater intake system using source water supplied from the existing Moss Landing Power Plant once-through cooling water return system, an open-water brine discharge system through the Moss Landing Power Plant, and a variety of conveyance and storage facilities, including approximately 28 miles of pipeline and an aquifer storage and recovery system. The aquifer storage and recovery system consists of two existing and two proposed injection/extraction wells.[38] The proposed project would produce 8,800 afy of desalinated water in non-drought years (and 10,900 afy in drought years) that would be delivered to Cal-Am's Terminal Reservoir for distribution to its customers. We note that the proposed project and the alternative projects include certain storage, delivery and distribution components that would be owned and operated by Cal-Am. Because these elements are common to all projects, these are known as "common" components, or the Cal-Am only facilities.

[38] The existing injection/extraction wells supply 920 afy. The proposed wells are expected to provide a long-term average of 380 afy.

Several parties have pointed out that the proposed project is unlikely to be permitted.[39] The FEIR explains that § 316(b) of the Federal Clean Water Act requires the Environmental Protection Agency to ensure that the location, design, construction, and capacity of cooling water intake structures for power plants reflect the best technology available to protect aquatic organisms from being killed or injured by impingement or entrainment. Impingement refers to aquatic organisms being pinned against screens or other parts of a cooling water intake structure; entrainment refers to aquatic organisms being drawn into cooling water systems and subjected to thermal, physical, or chemical stress. The Moss Landing Power Plant currently takes in water for cooling and in that process, impinges and entrains numerous fish and aquatic organisms.[40]

There is no longer support for the Moss Landing project. Cal-Am acknowledges that the "California American Water-owned water supply alternatives would likely result in extensive delays and costs from permitting requirements and other obstructions. The Moss Landing Project's open intake

---

[39] On May 10, 2010, the SWRCB issued Resolution No. 2010-0020, adopting a Proposed Water Quality Control Policy on the Use of Coastal And Estuarine Water for Power Plant Cooling and Associated Certified Regulatory Program Environmental Analysis. The SWRCB is designated as the state water pollution control agency for all purposes stated in the Clean Water Act and the Regional Water Boards are authorized to issue National Pollutant Discharge Elimination System permits. According to the SWRCB, the intent of the adopted policy is to ensure that beneficial uses of California's coastal and estuarine waters are protected, while also ensuring that the state's electrical supply needs continue to be met. Overall, the goal of the adopted policy is to ensure that the owner or operator of an existing power plant can reduce impingement mortality and entrainment by either reductions in velocity, flow, or control technologies. The regulations were approved by the Office of Administrative Law on September 27, 2010. The SWRCB has proposed certain amendments to the policy, which will be considered on December 14, 2010.

and once-through cooling design is environmentally controversial and subject to increasingly restrictive regulations."[41]

8.1.2. North Marina Alternative

The North Marina alternative consists of much of the same infrastructure as described above. The North Marina alternative would also be owned and operated by Cal-Am, but the desalination plant would be sited on 10 acres at the Armstrong Ranch (near the MRWPCA site) and sized to produce 11 mgd of desalinated water. The North Marina alternative utilizes a seawater intake system consisting of six new subsurface beach slant wells, an open-water brine discharge system through the existing MRWPCA outfall, project water conveyance and storage infrastructure, including several miles of pipeline and an aquifer storage and recovery system, as described above. The main differences between the Moss Landing Project and the North Marina alternative are location and size of the desalination plant, the intake technology, and the outfall.

The North Marina alternative would also produce 8,800 afy of desalinated water in non-drought years (and 10,900 afy in drought years) that would be delivered to Cal-Am customers. The desalination plant is larger, because any source water that originated from the Salinas Valley Groundwater Basin would be returned to the Basin through deliveries to the Castroville Seawater Intrusion Project (CSIP). Because groundwater modeling indicates that source water pumped from the slant wells over the long term could include a small amount of intruded groundwater from the Salinas Valley Groundwater Basin, the North Marina alternative includes a provision for excess desalinated water to be

---

[40] FEIR at 4.3-15.

[41] Exhibit 100 at 7.

returned to the Salinas Valley Groundwater Basin via the CSIP's storage pond. Thus, desalinated water would be delivered to the Cal-Am Terminal Reservoir for distribution to its customers and to the CSIP pond for distribution to the Salinas Valley Groundwater Basin.

8.1.3. Regional Project

Given the complexity of the water supply issues facing the Monterey Peninsula, D.03-09-022 directed Cal-Am to "thoroughly explore opportunities for partnerships with other regional water supply entities as it prepares its PEA and to incorporate such partnerships into the project, if appropriate."[42] Cal-Am included a preliminary assessment of such a regional approach in its PEA. DRA built on this work and worked with the University of California, Santa Cruz Center for Integrated Water Research to determine whether a more cost-effective and fully developed regional approach could be developed as an alternative to the proposed project. Accordingly, the Regional Project would address water supply demands within the Cal-Am service area and in other areas of northern Monterey County.

The Regional Project analyzed in the environmental documents was developed after extensive public input through the establishment of several community-based working groups, now known collectively as Water for Monterey County Coalition. The Regional Project has been envisioned as having two phases, and Phase 1 is analyzed at a level of detail consistent with the proposed project and the North Marina alternative. Due to the legal constraints on diversions from the Carmel River and the Seaside Basin, the various components of Phase 1 of the Regional Project would, taken together, provide

"regulatory replacement" water supply of 15,200 afy (12,500 afy to Cal-Am customers and 2,700 afy of water supply to the Ord Community); therefore, Phase 1 is the first priority for project implementation.[43] In addition to the primary objectives described above, the Phase 1 Regional Project is designed to address the following objectives and opportunities:

- Satisfy MCWD's obligation to provide a water supply adequate to meet the approved redevelopment of the former Fort Ord;
- Satisfy MCWRA's obligation to maintain hydrologic balance of the Salinas Groundwater Basin;
- Satisfy MCWRA's obligation to protect agricultural water users' utilization of water resources;
- Maximize regional reliability;
- Maximize use of recycled and freshwater sources;
- Maximize funding opportunities through regional cooperation; and
- Integrate urban, agricultural and environmental objectives.[44]

---

[42] D.03-09-022 at 12.

[43] As noted in the FEIR, Cal-Am, MCWD, and MCWRA have continued to work together to refine the components of Phase 1 of the Regional Project, and the FEIR has been updated to reflect those changes. FEIR at 5-1.

[44] These objectives were developed by Water for Monterey County Coalition in developing its goals for the Regional Project and were not included in the alternative analysis considered in the FEIR. Water for Monterey County is a group of regional stakeholders (federal, state, local government representatives, water agencies, citizen groups, nonprofit groups) that evolved from the Regional Project Plenary Oversight Group, a project initiated by DRA and University of California at Santa Cruz in 2007 to pursue the Regional Project.

Phase 1 of the Regional Project includes previously analyzed and permitted water supply projects that will be undertaken whether or not the Coastal Water Project is implemented. These projects include the Sand City desalination plant,[45] the Regional Urban Water Augmentation Project (RUWAP),[46] and two existing aquifer storage and recovery wells, as well as potential demand offset of up to 1000 afy from conservation. New aspects of Phase 1 of the Regional Project that were analyzed in the environmental documents include a 10-mgd desalination plant, to be owned and operated by MCWD and six vertical intake wells to provide source water. The desalinated water (8,800 afy in non-drought years and 10,900 afy in drought years) would be delivered to the Cal-Am Terminal Reservoir system for distribution to its customers and to the MCWD system (approximately 1,700 afy in non-drought years) for distribution to its customers.

Phase 2 of the Regional Project has been studied at a more general or programmatic level, consistent with the information that is available at this time. As explained in the FEIR, the components of Phase 2 of the Regional Project have been included for context and for informational purposes; they would not function as an alternative that would meet the project objectives and are not subject to our approval at this time. The anticipated components of Phase 2 are:

---

[45] The FEIR for the Sand City desalination plant was certified by the City of Sand City in 2005, with an addendum approved in 2007. Construction began in 2008 and the desalination plant became operational in 2010. The Sand City desalination plant will provide 300 afy.

[46] The Regional Urban Water Augmentation Project was approved by the MCWD in 2004 (with addenda in 2006 and 2009) and will provide delivery of recycled water from the Salinas Valley Reclamation Plant for urban irrigation uses.

- 13 mgd total desalination plant (expanded by 3 mgd);
- 8 total new subsurface intake wells (expanded by 2 wells);
- 5 additional injection wells for Seaside Groundwater ASR Expansion I and II;
- Existing Salinas River Diversion Facility and new 14 mgd Surface Water Treatment Plant at North Marina;
- Expansion of the CSIP and perched water storage at the Armstrong Ranch, additional distribution pipelines to provide additional Salinas Basin Groundwater for north Monterey County; and
- The Seaside Groundwater Basin Replenishment Project, which is a planned reverse osmosis treatment of recycled water from MRWPCA treatment plant at an Advanced Water Treatment Plant and injection of treated water for groundwater recharge.

An important component of Phase 2 of the Regional Project will consider an expanded use of recycled water to serve agricultural and landscape irrigation. Appropriate use of recycled water and recycled water infrastructure remains controversial. While there are multiple ways to utilize the unallocated balance of the recycled water produced at the Salinas Valley Reclamation Project (operated by the MRWPCA), some believe it should be used for agricultural use and some believe it should be used for urban irrigation and landscaping use. How the recycled water is used, who has rights to use it or deliver it, and what facilities are used for this delivery remain controversial issues to be addressed in Phase 2 of the Regional Project. We note that additional environmental review will be required for specific projects in Phase 2. At the programmatic level, the FEIR has found that there may be significant and unavoidable impacts associated with water quality, growth, and liquefaction in Phase 2 of the Regional Project. We do not address those issues in this decision; here, we address only the

environmental impacts associated with the new aspects of the Regional Project, as defined.

8.1.4. No-Project Alternative

Under the No-Project Alternative, water management in the Cal-Am service area would be severely curtailed, in order to comply with the SWRCB Cease and Desist Order. If adopted, the Cease and Desist Order would impose a phased ramp-down from Cal-Am's existing interim pumping limit on the Carmel River, as we discuss above. Implementation of the No-Project Alternative would eliminate all of the impacts for the three projects analyzed in the FEIR. However, the resulting water supply deficit would lead to severe rationing and possible water shortages. These conditions, in turn, would potentially have significant effects on the local economies within the Monterey Peninsula.

Many of the speakers at the PPHs remarked on the potential harm to the area, if no project were built. Several speakers pointed out their concerns with the economic impact if there is not a water supply replacement project before the restrictions required by the Cease and Desist Order are imposed.[47]

The evidence corroborates the concerns expressed by the community. As stated by Berkman and Sunding in Exhibit 326:

> Finally, we think that it is important to consider that the failure to proceed with the regional facility will have substantial economic impacts on CAW's residential, commercial and industrial customers. A conservatively-estimated 50% water reduction of this magnitude will have negative consequences for residential customers. A reduction of this magnitude will create

[47] See, e.g., RT at 1922, 1986, 1988-89.

> substantial hardships including reduced bathing, clothes washing, and waste removal and eliminate recreational and aesthetic benefits of water use. A conservative quantification of this hardship is between $17 and $51 million annually. Industrial and commercial customers will be forced to reduce output and employment to cope with reduced water supplies. We estimate that annual industrial sales losses within the CAW service territory will be $261 million, annual commercial sales losses will be $742 million and employment losses will total almost 6,000 jobs.[48]

We concur with the findings of the FEIR: the No-Project Alternative would fail to meet any of the Coastal Water Project objectives, including the objective to protect the local economy from the effects of an uncertain water supply. In addition, the No-Project Alternative would not satisfy the requirements of Order 95-10, would not protect the Seaside Basin, would not result in a drought-proof water supply, and would not protect the listed species in the riparian and aquatic habitat below the San Clemente dam. We find that the No-Project Alternative is not a tenable option.

[48] Exhibit 326 at 3.

9. Findings of the Environmental Process

As required by CEQA, the FEIR presents conclusions regarding the overall environmentally superior alternative, taking the "No-Project" analysis into consideration. This comparison is based on the environmental impacts of the proposed project and each alternative, as identified in Reference Exhibit B, Section 7.[49] Alternatives are compared by summarizing the impacts of each alternative in each environmental issue area, considering the relative importance of the issues, and then identifying the alternative with the least overall impact on the environment.

Because of the lengthy history of the Coastal Water Project, the EIR alternatives analysis entailed consideration of many alternatives in the context of several different proposed projects and various related documents, including the New Los Padres Dam and Reservoir EIR (originally proposed by MPWMD in 1989 and defeated by voters in 1995), the Carmel River Dam and Reservoir Project (considered in A.97-03-052, precluded by AB 1182, and dismissed in D.03-09-022), and the Commission's Water Supply Contingency Plan Evaluation and Coastal Water Project EIR (prepared in response to AB 1182 and known colloquially as Plan B). The alternatives considered in the instant FEIR include several basic elements: a desalination plant, a water intake mechanism, a brine outfall mechanism, desalinated water conveyance and storage infrastructure, and aquifer storage and recovery. We address the environmental impacts and

[49] The DEIR is marked and identified as Reference Exhibit A and the FEIR is Reference Exhibit B. The Addendum to the FEIR is Reference Exhibit C. The CEQA findings and statement of overriding consideration adopted by MCWD is Reference Exhibit D and the CEQA findings and statement of overriding consideration adopted by the Monterey County Board of Supervisors for MCWRA is Reference Exhibit E.

discuss the environmentally superior alternative in terms of the proposed locations and components required for the Coastal Water Project.

In selecting the environmentally superior alternative, the FEIR considered the environmental impact of each project, which of the projects evaluated in the FEIR had the fewest significant-and-unavoidable impacts, and which, if any, of the proposed alternatives would lessen or eliminate any significant-and-unavoidable or potentially-significant-but-mitigable impacts. The FEIR finds that the environmental impacts of the Moss Landing Project and the North Marina Project are generally similar. However, the FEIR determines that the North Marina Alternative has several advantages over the Moss Landing Project in terms of the scope of the environmental effects:

1. The North Marina Alternative includes approximately 5 miles less of pipeline installation, because it does not include the Transmission Main North. Therefore, it would have significantly fewer construction-related impacts than the Moss Landing Project.
2. The North Marina Alternative's intake facilities are subsurface wells and thus avoid effects related to entrainment and impingement.
3. The North Marina Alternative's intake and outfall processes are not dependent on a once through cooling system and thus avoid future issues related to water quality and marine biological resources.
4. The North Marina Alternative would explore opportunities for regional partnerships and avoid duplicative facilities and infrastructure, and therefore would potentially eliminate the amount of construction and related impacts that would otherwise occur at the regional level.

Thus, the North Marina Alternative is considered to be environmentally superior to the Moss Landing Project.

The environmental impacts of the Phase 1 Regional Project are also addressed in Table 7-1 of the FEIR. The North Marina Alternative and the Phase 1 Regional Project are nearly equal in their level of environmental impacts. There are two impacts that factor into the determination of the environmentally-superior alternative: operation-related greenhouse gas emissions and construction-related particulate matter greater than 10 microns (PM10). The FEIR has determined that the thresholds established for each of these impacts may be exceeded and has defined measures to mitigate these impacts to acceptable levels. Assuming that the mitigation measures set forth in the FEIR are imposed and fully implemented by all pertinent agencies, the Regional Project would be the environmentally-superior alternative. This is true because:

1. The Regional Project is a 10-mgd facility and therefore would require less feedwater than the 11-mgd North Marina alternative, and would also result in less brine being discharged to the ocean;
2. The Regional Project would use less energy to generate water in a drought condition;
3. As analyzed in the FEIR, the Phase 1 Regional Project would include 6 vertical wells at 200 feet deep, as opposed to 6 slant wells at 750 feet long for the North Marina Project, which would result in a shorter drilling period and the need to dispose of less spoil material; and
4. Implementation of the Regional Project would eliminate the need for the MCWD to develop its own 3 mgd desalination facility (as previously approved by MCWD and examined in the certified RUWAP EIR) in addition to a Cal-Am-only desalination facility. Having one desalination facility instead of two would allow for more efficient operations and minimize construction and operational impacts to the environment.

Because MCWD, MCWRA, and MRWPCA would implement the Regional Project and because these Public Agencies are not under this Commission's jurisdiction, the FEIR concludes that we cannot ensure compliance with the mitigation efforts to ensure that the outcome would result in less-than-significant impacts. This is a conservative, but reasonable approach. Thus, the FEIR classifies the greenhouse gas emissions and PM10 impacts associated with the Regional Project as significant and unavoidable. The FEIR concludes that if the Public Agencies agree to implement all of the mitigation measures, the Regional Project would be the environmentally superior alternative.

Because of the Cease and Desist Order, the FEIR also recognizes that time is of the essence, in terms of developing a replacement water supply to cease unauthorized withdrawal of water from the Carmel River. Accordingly, the FEIR concludes that the potential need to accelerate the construction schedule may make it unrealistic for any of the proposed projects to comply with the PM10 mitigation measure (Mitigation Measures 4.8-1.d and 6.8-1a.) If the PM10 mitigation strategies were pursued, construction would have to proceed more slowly to ensure that maximum daily PM10 significance levels were not exceeded. However, if the mitigation measures are deemed infeasible at the project decision-making level, then all alternatives would be equal in terms of impact stemming from PM10 emissions during construction.

MCWD has certified the FEIR for its use and issued a statement of overriding consideration, because it cannot assert control over all aspects of the project, and because of the cumulative effects of the Regional Project, related to construction (as to air quality and noise) and operation (as to air quality), when considered with several other projects underway or soon to be underway in the Monterey Peninsula. MCWRA has also issued a statement of overriding

considerations as to the potentially considerable and significant cumulative impacts on air quality and noise, and because of potential conflict with the goal of reducing greenhouse gas emissions in California to 1990 levels, consistent with the requirements of AB 32 (Stats. 2006, Ch. 488).

For all of these reasons, the FEIR has identified the North Marina Alternative as the environmentally superior alternative, albeit by a very narrow margin. By today's decision, we find that the PM10 mitigation measures are not feasible for any of the projects, due to the timing requirements of the Cease and Desist Order and the urgency of the water supply need. Accordingly, the Mitigation Monitoring and Reporting Program adopted in Appendix C does not include the PM10 mitigation measures. Because we cannot assert jurisdiction over the Public Agencies, we do find that impacts from greenhouse gas emissions cannot be mitigated. The FEIR identified certain environmental impacts that could not be mitigated for each of the projects studied, including the environmentally superior alternative. We discuss these below.

9.1. Significant and Unavoidable Environmental Impacts that Cannot be Mitigated

Certain impacts discussed in the FEIR are considered to be significant and unavoidable in the areas of greenhouse gas emissions and air quality. While certain indirect effects of growth resulting from implementation of the Coastal Water Project as a whole are considered significant and unavoidable for Phase 2 of the Regional Project, no action is being taken at this time on the Phase 2 Regional Project, and we do not discuss these impacts here.

9.1.1. Greenhouse Gas Emissions

The total estimated greenhouse gas emissions amounts that would be associated with the operations of the Moss Landing Project or the North Marina Project would exceed the amount of the preliminary draft significance threshold

established by the California Air Resources Board. Implementation of Mitigation Measures would reduce short-term construction and long-term operations emissions of greenhouse gas emissions. Implementation of Mitigation Measures 4.8-5c: Energy Minimization and Greenhouse Gas Reduction Plan would ensure that annual project greenhouse gas emissions level would be below 7,000 metric tons; accordingly, impacts would be mitigated to less than significant.

The DEIR disclosed a significant and unavoidable impact related to greenhouse gas emissions for the Regional Project. Mitigation Measure 4.8-5.c has been determined to be a feasible mitigation measure that can and should be adopted by this Commission and the Public Agencies that will be associated with the Regional Project. If adopted and applied to the Regional Project as a whole, Mitigation Measure 4.8-5.c, in conjunction with other mitigation measures, would reduce the Regional Project's operation-related greenhouse gas emissions to a less than significant level. However, as discussed above, because several components of the Regional Project would occur under the jurisdiction of other agencies, we cannot guarantee that Mitigation Measure 4.8-5.c would be implemented to ensure that total greenhouse gas emissions do not exceed the significance threshold. Indeed, both MCWD and MCWRA have adopted a Statement of Overriding Consideration with regard to the greenhouse gas emissions level. Thus, as set forth more fully in the CEQA Findings, we find Mitigation Measure 4.8-5.c to be infeasible, and, for purposes of this decision, greenhouse gas emissions impacts associated with the Regional Project continue to be classified as significant and unavoidable. As for the Cal-Am facilities, we require Cal-Am to adopt the feasible mitigation measures that we have included in Appendix C.

9.1.2. Air Quality

The FEIR assumed that emissions from construction of the Regional Project components would occur simultaneously. This is the most conservative assumption for daily emissions and the worst-case day emissions would occur when construction of the components would overlap and exceed the Monterey Bay Unified Air Pollution Control District's significance threshold of 82 pounds per day of PM10. Mitigation Measure 6.8-1.a, if implemented, would reduce construction emissions to a level below the threshold of significance. Since there is no guarantee that all relevant agencies would impose these measures as conditions of approval on the portion of the Regional Project under their jurisdiction, and due to the timing constraints imposed by the Cease and Desist Order, we have determined that it is infeasible to impose this mitigation measure. Impacts to regional air quality that would result from construction of any of the projects are considered to be significant and unavoidable.

9.2. Cumulative Impacts

The FEIR analyzed the collective impacts of all project-level and program-level projects included in the Coastal Water Project, as well as the potential for overlap with other relevant projects proposed or planned in the region. Again, the FEIR takes the conservative approach and assesses the potential for overlapping impacts associated with multiple projects proposed for construction within the same time frame and same geographic area. We highlight the major potential cumulative impacts below.

9.2.1 Air Quality

Concurrent construction of the relevant projects (listed in Table 9-1 of the FEIR) could generate greater emissions of certain pollutants, including fugitive dust and equipment exhaust particulate matter and could cause a significant

cumulative impact. Implementation of several mitigation measures would reduce the PM10 emissions from the Moss Landing and North Marina Projects to a less than cumulatively considerable level. As previously noted, because of the time constraints imposed by the Cease and Desist Order, we have determined that these mitigation measures are not feasible.

Long-term greenhouse gas emissions associated with the substation for the Moss Landing and North Marina Projects would exceed the amount of California Air Resources Board's preliminary draft significance threshold for carbon emissions. The FEIR has set forth mitigation measures to avoid or substantially reduce the greenhouse gas emissions to the extent feasible, and the impact would not be cumulatively considerable for the Moss Landing and North Marina Projects. However, since we cannot guarantee that the various agencies involved in the Regional Project would implement the mitigation measures in a coordinated fashion, impact from greenhouse gas emissions from the Regional Project could have cumulative considerable contribution toward the cumulative impacts.

9.3. CEQA Findings of Facts

Based upon the FEIR, we have prepared a set of CEQA Findings of Fact (CEQA Findings) pursuant to CEQA Guidelines § 15091 regarding each significant impact associated with the authorized alternative, appended to this decision as Appendix B. We find that the CEQA Findings accurately reflect the independent analysis contained in the FEIR, the Commission's policy decisions, as well as other information in the record, and are supported by substantial evidence in the record. As to the Cal-Am portion of the Regional Project, we find that changes or alterations have been required in, or incorporated into, the Regional Project which avoid or substantially lessen the significant

environmental effects identified in the FEIR. As to the non Cal-Am portions of the Regional Project, we find that the applicable and feasible mitigation measures described in the CEQA Findings can and should be (and in most cases, already have been) imposed as conditions of approval by MCWD, MCWRA and/or MRWPCA on the Regional Project. We further find that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives that are not required in, or incorporated into, the Regional Project.

9.4. Statement of Overriding Considerations

As required by CEQA, we cannot approve the proposed project or an alternative unless we find that the project has been modified to mitigate or avoid each significant effect on the environment; or that specific considerations make the mitigation measures or alternatives identified in the FEIR infeasible; and specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment. Here, as we have discussed, because we are approving the Regional Project, this Commission cannot guarantee that the Public Agencies involved will comply with the mitigation measures recommended in the FEIR. Because we have determined that the mitigation measures for PM10 for any of the projects are infeasible due to the urgency of the need for a new water supply, we consider only the greenhouse gas emissions in considering the environmentally superior project.

Because of the myriad social, economic, and legal issues we discuss in this decision, while the Moss Landing and North Marina Alternatives may be feasible from an environmental perspective, we conclude that the Regional Project is the only feasible alternative that can provide the necessary water supply in the timeframe that the Cease and Desist Order imposes.

We make this determination for several reasons, which we mention briefly here, and expand on throughout this decision and in the CEQA Findings of Fact. First, the need for a replacement water supply is urgent. The SWRCB Cease and Desist Order could lead to severe water restrictions and rationing, should the projects be delayed due to litigation. Second, Monterey County Code Chapter 10.72.030(B) prevents private entities from owning desalination plants; therefore, Cal-Am ownership of the North Marina Alternative could lead to lengthy litigation.[50] Under the Regional Project, MCWD, a Public Agency, owns the desalination plant. Finally, there is no source water on the Monterey Peninsula. Use of Salinas Valley groundwater as a desalination source water supply must be structured in such a way to ensure that water drawn from the Salinas Valley groundwater basin remains in that basin. As proposed in the Settlement Agreement, and explained in Exhibit 329, the Regional Project is so structured.

Accordingly, as specified in the Statement of Overriding Considerations of the CEQA Findings (Appendix B), and discussed more fully herein, we conclude that specific economic, legal, social, technological or other benefits of the Regional Project outweigh the significant and unavoidable impacts of the Project.

A Mitigation Monitoring and Reporting Program, which presents the recommended mitigation measures and a process for monitoring the implementation of those measures, has been prepared and is attached as Appendix C. We hereby adopt the Mitigation Monitoring and Reporting Program and require Cal-Am to comply with the Mitigation Monitoring and

[50] Exhibit 336 at 2.

Reporting Program as a condition for our approval of Cal-Am's participation in the Regional Project and as a condition for issuing the Certificate of Public Convenience and Necessity. We are pleased that the Public Agencies recognize the importance of the mitigation measures and acknowledge their intention that "the development, construction, and operation of the Regional Desalination Project occur in accordance with the FEIR and that MCWD and MCWRA each act as a Responsible Agency in accordance with CEQA to implement the Regional Desalination Project."[51]

We note that providing water for growth is a highly charged issue on the Monterey Peninsula. The Moss Landing Project, the North Marina Project and the Regional Project all provide water for existing uses. Phase 1 of the Regional Project also provides replenishment water for previously-approved supply for portions of Fort Ord within the MCWD service area (in and of itself a controversial issue when it comes to cost-sharing, as we shall see). The Phase 2 Regional Project includes supplies to meet the needs of approved growth. With this context in mind, we turn to the proposed Settlement Agreement and Implementing Agreements.

10. Overview of Proposed Settlement Agreement

Rule 12.1(d) of our Rules of Practice and Procedure states that settlements will not be approved unless the settlement is reasonable in light of the whole record, consistent with law, and in the public interest. Here, we have a contested settlement; however, it is supported by many factions within the community that represent several of the affected interests, including the environmental

[51] Exhibit 301 at 2.

community. We commend all of the parties for their diligent work in negotiating difficult public policy issues. We also commend ALJ Bruce DeBerry, who was the mediator for the lengthy ADR sessions that resulted in this settlement.

Cal-Am, MCWD, MCWRA, MRWPCA, Surfrider Foundation, Public Trust Alliance, and Citizens for Public Water are all active parties in this proceeding and have agreed that the Regional Project provides the most expeditious, feasible, and cost-effective alternative to address the water supply constraints on the Monterey Peninsula. We refer to MCWD and MCWRA as the Public Agencies. The Settling Parties contend that the Regional Project "(i) addresses the water supply constraints in Monterey County in a way that best serves (a) community values, (b) recreational and park areas, (c) historical and aesthetic values, and (d) influence on the environment, (ii) is by far the least costly and the most environmentally benign, (iii) is the most and perhaps only feasible project alternative, and (iv) best conserves and protects public trust assets, resources, and values impacted by providing a water supply."[52]

The Settling Parties also maintain that time is of the essence, both because of the pending Cease and Desist Order and because there are financing opportunities that may be lost if the Regional Project is delayed. The Settling Parties contemplate obtaining tax-exempt private activity bonds and/or low-interest State Revolving Fund financing allocated for 2010, as well as various grants that may be budgeted for 2010. These parties also recognize that there is a favorable construction climate in California, due to the generally weak economic conditions.

---

[52] Motion to Approve Settlement Agreement at 5-6.

As proposed in the Settlement Agreement, MCWRA will construct, own, operate, and maintain the brackish source water wells that will provide the feedwater for the desalination facility, as well as the conveyance pipeline to the desalination facility. MCWD will construct, own, operate, and maintain the desalination plant and transport the desalinated water to a delivery point within its service territory. At that point, MCWD will receive a portion of the water and Cal-Am will receive a portion of the water. Cal-Am will construct, own, maintain, and operate three large diameter conveyance pipelines, two distribution storage reservoirs, and aquifer storage and recovery facilities; all of these facilities will provide the infrastructure to serve its customers with the desalinated water (also known as product water). The brine from the desalination plant would be discharged through the outfall owned and operated by MRWPCA.

As conceived, both MCWD's and MCWRA's participation in the Settlement Agreement are essential to the feasibility of the Regional Project. First, MCWD has an executed option to annex portions of the Armstrong Ranch, where the desalination plant is proposed to be located,[53] and the MCWD facilities are located within the Salinas Valley. Because the source water cannot be exported from the Salinas Valley, this factor becomes a critical component to the Regional Project. In addition, according to the provisions of Monterey County Code Chapter 10.72.30(B), private ownership of a desalination plant is prohibited. Second, MCWRA must satisfy the requirements of the Agency Act and protect the farmers and agribusinesses that participate in and fund the

[53] Exhibit 357.

Salinas Valley Reclamation Project, CSIP, and the Salinas Valley Water Project. The settling parties contend that absent the participation of both MCWD and MCWRA, years of litigation are likely to ensue. For example, witness Lowrey of MCWD testifies that the cooperation between MCWD and MCWRA "would be legally useful to the Regional Project and that water developed by the MCWRA was a factor in the analysis of the right to use brackish water for the Regional Project. . . The WPA provides a cooperative framework for ongoing technical testing and physical solutions to potential water rights issues, mitigating the need for court action to establish such a framework and such solutions."[54]

The Settlement Agreement includes two implementing agreements: a Water Purchase Agreement and an Outfall Agreement. The Water Purchase Agreement provides extensive detail as to each party's rights and responsibilities, and addresses the design, construction, and permitting of the components of the proposed Regional Project. The Outfall Agreement commits sufficient capacity in the existing MRWPCA's outfall such that MCWD can discharge the brine.[55] These agreements are complex and detailed, and will be discussed below. We provide a general overview of the agreements to provide context for our discussion of the Settlement Agreement. As proposed, Cal-Am and the Public Agencies are parties to the Water Purchase Agreement. The Water Purchase Agreement:

---

[54] Exhibit 361 at 2-3.

[55] Although the Motion to Approve Settlement Agreement asks that the Commission approve both the Water Purchase Agreement and the Outfall Agreement, parties have clarified on the record that they do not expect the Commission to approve or have oversight over the Outfall Agreement, which is an agreement exclusively between MCWD and MRWPCA.

1. Has an initial term of 34 years, with 6 automatic renewal terms of 10 years each;
2. Requires the construction of test wells, the data from which will be analyzed by MCWRA to ensure compliance with the Agency Act (such that groundwater is not exported from the Salinas Valley Groundwater Basin);
3. Addresses financing for the project facilities, which for MCWD and MCWRA is to include low-cost State Revolving Fund loans, as well as grants, where available, which is expected to lower the cost of the Regional Project. Cal-Am will provide shortfall financing for the project, if necessary;
4. Pursuant to the Outfall Agreement, MCWD will connect and use capacity in the ocean outfall components of MRWPCA's regional treatment plant to carry the reject water and brine discharged from the desalination plant. MCWD will pay all costs related to the construction of a connection to the MCWD facilities and a brine receiving facility that are attributable to and used for the discharged brine. The Outfall Agreement also provides for a one-time capacity charge that MCWD will pay to MRWPCA and fair and reasonable O&M costs attributable to MCWD's use of the brine-receiving facility and the outfall discharge, as well as capital repair and replacement costs. Like the Water Purchase Agreement, the term of the Outfall Agreement is 34 years, with 6 automatic 10-year renewals;
5. Whether the facilities are owned and operated by MCWD, MCWRA, or Cal-Am, the costs of the entire project are expected to be borne by Cal-Am ratepayers. MCWD's and MCWRA's costs of constructing and operating their portions of the Regional Project facilities will be included in the calculation of the costs of the desalinated water (or product water), which will be charged to Cal-Am under various provisions of the WPA. In addition, all costs incurred by MCWD under the Outfall Agreement will be included in the cost of the product water;

6. As proposed in the Settlement Agreement, all costs addressed in the Water Purchase Agreement or Outfall Agreement and any shortfall financing provided by Cal-Am will be considered to be reasonable and prudently incurred, if approved by the Commission. Costs for the Regional Project include capital costs, financing costs, costs of obtaining indebtedness, a reserve fund for needed replacements, contingency costs, and O&M costs;
7. Cal-Am proposes to recover the costs of the product water through a Modified Cost Balancing Account, which is currently used to recover the costs of purchased water;
8. For the Cal-Am facilities, Settling Parties propose that, once constructed, the conveyance, pumping, and reservoir facilities will be designated as used and useful for ratemaking purposes, even if the Regional Project is delayed for some reason. The parties contend that this approach is reasonable because these facilities provide important utility services that resolve two operational limitations of Cal-Am's existing distribution system: 1) the facilities will allow Cal-Am to maintain adequate water levels in the Forest Lake tanks during maximum day demand and 2) the facilities will allow Cal-Am to move water from the Seaside area to the rest of the Monterey Peninsula. Cal-Am states that resolving these operational issues will provide increased storage to meet emergency and fire conditions and will increase fire flow capability to Seaside, Monterey, and Pacific Grove. The transfer pipeline used to deliver desalinated water downstream from the delivery point to the Cal-Am facilities throughout its distribution system will not be deemed used and useful until the Regional Project is completed. Cal-Am will include costs related to the construction of its facilities in rate base, either as Construction Work in Progress or Utility Plant in Service. Settling Parties propose that all project costs will earn a return on the carrying costs for the project (i.e., Allowance for Funds Used During Construction (AFUDC) until such time as they are allowed in rate base;

9. Cal-Am plans to file semi-annual advice letters to move the costs into rate base and Cal-Am will continue to adjust base rates until the entire project is closed out to Utility Plant in Service. Cal-Am proposes to file Tier 2 advice letters to modify rate base and to adjust rates; and
10. Finally, Settling Parties recognize the significant rate impact of the Regional Project and recommend that the Commission expand eligibility of customers for Cal-Am's low-income ratepayer assistance program and adopt a more progressive rate design.

We turn now to the Water Purchase Agreement, which provides important details for implementation of the Settlement Agreement.

11. Water Purchase Agreement

The Water Purchase Agreement is complex and detailed. It specifies the duties and responsibilities of Cal-Am, MCWD, and MCWRA, with regard to ownership, construction, maintenance, and operation of the facilities included in the Regional Project. It also specifies the financing and cost responsibilities of each entity. We summarize the major provisions of the Water Purchase Agreement here, describe DRA and MPWMD's concerns, and discuss our disposition of the objections.

11.1. Ownership and Cost Containment

a. Term: As stated above, the initial term of the agreement is 34 years, with 6 automatic renewal terms of 10 additional years each. As DRA puts it, for an agreement that could be in place for 94 years, it is important to "get it right."

b. Project Facilities:

1) Source Water: MCWRA will design and construct, in consultation with Cal-Am and MCWD, new wells for the extraction of brackish source water, to be owned and operated by MCWRA and located on MCWRA-owned real property. MCWRA will also own and operate existing monitoring wells as

Inland Water Monitoring Wells, and if necessary, may design and construct up to seven new inland monitoring wells to monitor the impact of the extraction of the brackish source water on the Salinas Valley Groundwater Basin. MCWRA will also design and construct (in consultation with Cal-Am and MCWD) and will own and operate a series of water conveyance facilities to convey the brackish source water from the wells (each of which will have a brackish source water meter) to the brackish source water receipt point meter. These facilities are known as the MCWRA Brackish Source Water Pipeline.

2) Desalination Plant: MCWD will design and construct, in consultation with Cal-Am and MCWRA, a desalination plant, to be owned and operated by MCWD and located on MCWD-owned real property, for the purpose of desalinating brackish source water such that the resulting treated water is product water. MCWD will own, operate, design and construct, again in consultation with Cal-Am and MCWRA, the brackish source water pipeline to convey the brackish source water from the brackish source water receipt point meter to the desalination plant. These facilities are known as the MCWD Brackish Source Water Pipeline.

MCWD will also design and construct (in consultation with Cal-Am and MCWRA) and will own and operate a series of conveyance facilities known as the MCWD Product Water Pipeline that will convey the desalinated water (or product water) to the Cal-Am delivery point. MCWD will install, maintain, and operate the desalination plant product meter, which will be designed to measure the discharge of product water into the MCWD Product Water Pipeline.

MCWD will also design and construct MCWD outfall facilities in consultation with Cal-Am and MCWRA. MCWD will own and operate these

facilities, which are a series of water conveyance facilities to convey reject water from the desalination plant to MRWPCA's outfall.

3.) Cal-Am Facilities: Cal-Am will design and construct its conveyance and distribution facilities in consultation with MCWD and MCWRA, and will own and operate the water delivery system from the delivery point and into the Cal-Am distribution system. None of the facilities owned by Cal-Am and downstream of the Cal-Am Meter located near the Marina/Seaside Border will be part of the project facilities.

c. Coordination of Design, Engineering, Construction, and Permitting of the Regional Project: As proposed, Cal-Am, MCWD, and MCWRA are each responsible for the permitting, design, and construction of the facilities they will own. In order to ensure coordination, the parties plan to jointly select and hire a project manager to manage the permit, design, engineering, and construction process, and to ensure that the proper coordination takes place. Cal-Am, MCWD, and MCWRA will work with an Advisory Committee (described below) to ensure coordination with respect to the permitting, design, and construction of the Regional Project.

d. Cost Management: The Settling Parties request that the Commission approve the estimated initial capital costs of the project facilities (calculated as of March 14, 2010). As described in MCWD's Opening Brief and as shown in Attachment C of Exhibit 301, the capital costs exclude interest during construction and any debt service coverage required to obtain financing for the Regional Project. The requested capital cost cap (escalated to mid-2012) is:

Table 1: Settling Parties' Cost Estimate (Exhibit C of Water Purchase Agreement)

Item		Estimated Costs, Escalated to 2012
Intake Wells (Slant Wells) and Pipeline		$26,300,000
Desalination Facility		$95,100,000
Product Water Pipeline (To CAW Delivery Point)		$18,700,000
Base Construction Cost		**$140,100,000**
Post -Effective Date Implementation Costs		$25,500,000
Project Administration and Oversight Expenses		$3,000,000
Start-up and Acceptance Costs		$4,000,000
Pre-Effective Date Costs and Expenses		$14,000,000
MRWPCA Outfall Capacity Charge		$3,000,000
Right of Way Easements and Land Acquisition		$2,000,000
Environmental Mitigation Measures Costs		$2,000,000
Capital Costs (Excluding Contingency)		$193,600,000
Project Contingency (25%)		$46,700,000
Most Probable Capital Cost with Contingency		**$240,400,000**
Design Development Allowance – High Estimate		42,070,000
Total Overall Estimated Project Facilities Cost		**$282,470,000**
Reserve Fund Account		$6,000,000
Costs of Obtaining Indebtedness (excludes interest during construction and debt service coverage)		$9,000,000
Total Estimated Costs per Settling Parties' Proposed Capital Cost Cap		**$297,470,000**

The Settling Parties state that the bidding selection, procurement process, and evaluation of proposals described in Sections 4.2 and 4.3 of the Water Purchase Agreement and the additional cost management features described in Section 4.3 will assist them in ensuring that the Regional Project is as

cost-effective as possible. The Settling Parties have agreed to hire a certified Value Engineer to review plans at particular points. As defined, value engineering is a specialized cost control technique in which the owner or operators meet and confer with a Certified Value Specialist to conduct a systematic and creative analysis of the functions of a project or operation to determine how best to achieve the necessary function, performance, and reliability of the project at the minimum life cycle cost.

To the extent that actual costs exceed the total estimated cost cap authorized by the Commission, the Water Purchase Agreement provides for Cal-Am to seek approval of those increased costs at this Commission. Parties include a provision that allows Cal-Am to terminate the Water Purchase Agreement if Cal-Am has diligently pursued the request for approval, approval is denied, or is not fully addressed by the Commission within six months. (Water Purchase Agreement, § 4.3(e).) Prior to such notice of termination, parties must meet and confer in order to consider alternative means of funding the cost overruns so that the Regional Project can continue. The Water Purchase Agreement also requires parties to "endeavor in good faith to administer the Prime Agreements . . . to which it is a party in a manner intended to result in the most cost effective construction and delivery of services considering all factors including the life cycle and functionality of the subject improvements."[56]

In addition to the detailed contracting provisions and cost management goals, the Water Purchase Agreement provides a detailed roadmap for the

---

[56] Exhibit 301, Water Purchase Agreement, § 4.3(f) at 26. The Prime Agreements are construction contracts and service agreements required for the design, permitting, and construction of each Party's facilities (Water Purchase Agreement, § 4.4(b)).

retention of a Project Manager, preparing preliminary design documents, and obtaining required permits, and establishes milestones for each of the MCWRA-owned, MCWD-owned, and Cal-Am owned facilities. Section 4 also provides for a Constructability Review (§ 4.6) and Inspection and Audit Rights (§ 4.11), as described below:

> Constructability Review: The Parties in consultation with the Project manager and the Advisory Committee, in accordance with Best Industry Practices, shall appoint a qualified Person or committee of qualified Persons who is/are independent from any Person or Persons who have designed any portion of the Project Facilities to review each of the Preliminary Design Documents, Procurement Documents and 100% Construction Documents, as appropriate, in order to provide an effective constructability review to assure that (i) the project Facilities as detailed in the Preliminary Design Documents, Procurement Documents and 100% Construction Documents, can be constructed using construction methods, materials and techniques in compliance with Best Industry Practices; (ii) the Preliminary Design Documents and Procurement Documents provide the contractor or contractors, as applicable, with clear, concise information that can be utilized to prepare a competitive cost-effective proposal; (iii) the Regional Desalination Project when constructed in accordance with the Preliminary Design Documents, Procurement Documents and 100% Construction Documents will result in a Regional Desalination Project that can be maintained in a cost-effective manner by the Parties throughout the Term of this Agreement; and (iv) the Project Facilities when constructed shall consider the lowest achievable lifecycle cost to operate and maintain the Project Facilities over their useful life.[57]
>
> Inspection and Audit Rights: Each Party and Project Manager shall have the right to review and audit the progress reports,

[57] Exhibit 301, WPA, § 4.6 at 28.

> progress payments, and other related information, including the right to independent inspection of each other Party's work in progress with respect to the Regional Desalination Project. During the progress of the work through Substantial Completion, each Party shall at all times during normal working hours afford the other Parties, their consultants, and Project Manager and appropriate regulatory representatives every reasonable opportunity for observing work in progress by such Party's contractors. . .[58]

11.2. Cost Recovery and Ratemaking Associated with Product Water Costs

DRA supports the regional desalination project, but contends that it cannot support the Settlement Agreement or the Water Purchase Agreement, because it does not include "effective cost controls, fair representation, or an equitable allocation of costs and risks among beneficiaries."[59] MPWMD also supports the Regional Project, but opposes aspects of the WPA, particularly regarding ratepayer representation and cost controls. Cal-Am ratepayers will be responsible for the costs of the product water, including the debt service and the O&M costs. To the extent that MCWD is taking Permanently Allocated Water (discussed below), MCWD will contribute an amount equal to its proportional share of debt service and O&M costs;[60] however, until that time, DRA and MPWMD contend that MCWD is not paying its fair share of costs. DRA explains that these "transfer costs" are "additional water costs that Cal-Am ratepayers will absorb to offset the lower price MCWD will pay relative to the actual cost of

---

[58] Id. § 4.11 at 31.

[59] DRA Opening Brief at 2.

[60] Exhibit 301, WPA § 11 at 53.

desalinated water from the plant."[61] DRA states that such costs are a subsidy from Cal-Am ratepayers to MCWD ratepayers and estimates that these costs are equivalent to $1,000 per acre-foot or $8.8 million. In 2009, parties estimate that MCWD would have paid only $148 per acre-foot, as compared to DRA's estimate of $5,000 per-acre foot of desalination water or $7,500 total cost to Cal-Am customers (including the estimated cost of debt equivalence).[62]

Prudency of costs is a particularly contentious issue. The Settlement Agreement provides that, all Public Agency costs are deemed to be prudent and reasonable. Section 10 of the Settlement Agreement states that "given the status of MCWD and MCWRA as governmental agencies and the requirements under law that they incur only reasonable and prudent costs and expenses for purposes related to their governmental duties and the fact that such costs and expenses are subject to public review and scrutiny, all Regional Desalination Project costs incurred by MCWD and MCWRA in compliance with the terms of the Water Purchase Agreement shall be deemed reasonable and prudent, and the Commission, by its approval of this Settlement Agreement, shall be deemed to have agreed that such costs are reasonable and prudent."

---

[61] Exhibit 202 at 4-32, Footnote 44, 4-33, and DRA Opening Brief at 13.

[62] Id.

The Water Purchase Agreement provides as follows in §11.2(d):

> All costs of the Parties pursuant to this Agreement shall be reasonably and prudently incurred. All payments made by CAW under this Agreement shall be deemed reasonable and to the extent practicable be included in the cost of Product Water. To the extent not already included in the CAW Product Water Contract approved rate recovery, any CAW costs, fees and expenses incurred under this Agreement that are not CAW Regional Desalination Project Related Expenses or CAW Project Administration and Oversight Expenses shall be included in the O&M Costs and shall be included in and recovered by CAW from the cost of the Product Water.

All costs associated with development and financing of the Regional Project are to be included in the cost of product water. To the extent that the Public Agencies have incurred costs to develop, permit, site, and legally defend these facilities, these are deemed "pre-effective date costs" that are also included in the cost of the product water.

Under the Water Purchase Agreement, the cost of the desalinated water will have two components: the debt service associated with financing the capitalized costs of the MCWD and MCWRA-owned facilities and the costs of operating and maintaining these facilities. Pursuant to the Settlement Agreement, Cal-Am will fund these costs through an escrow account and will then recover the costs from its Monterey District ratepayers through the Modified Cost Balancing Account – essentially a balancing account already established to record and recover in rates the costs of purchased water.

As set forth in the definitions section and § 11.14, MCWD will impose and collect water fees for connection of new facilities within the MCWD service territory and will apply a portion of these fees either to reduce the MCWD indebtedness or as a cash contribution to pay for the cost of the MCWD-owned

facilities. The application of such fees to reduce the capital costs of the facilities is subject to a ceiling or "fees limit" of $22 million. This amount could be further reduced by 16.2% of any grant funds obtained by MCWD, prior payments of the principal portion of MCWD's proportional share of debt service, or any prior collected fees used to reduce MCWD's indebtedness or O&M costs.

As we discuss below, DRA and MPWMD are especially concerned about these provisions, because they contend that Cal-Am ratepayers cannot be protected from unreasonable costs, which could simply be passed through to ratepayers. Rather than a capital cost cap, DRA recommends that the Commission impose a per-acre-foot cost cap of $2,200 for all costs associated with the desalinated product water (not including Cal-Am conveyance facilities). DRA maintains that any other approach would be tantamount to providing the Public Agencies and Cal-Am with a "blank check" because all costs would eventually be borne by Cal-Am's ratepayers. DRA contends that we cannot approve the Settlement Agreement and Implementing Agreements because they are unlawful, unreasonable, not in the public interest, and not supported by the record in this proceeding.

DRA strongly maintains that Cal-Am ratepayers should not subsidize MCWD ratepayers, particularly with regard to subsidizing future development of Fort Ord Reuse Authority, the former Fort Ord community. DRA also asserts that approving the proposed Settlement Agreement and WPA will result in rates that cannot be found to be just and reasonable: "The Proposed Settlement Agreement unlawfully prevents the Commission from carrying out its statutory duty to ensure that rates are just and reasonable because its provisions require

the Commission to find that all MCWD and MCWRA costs (no matter how high) are reasonable and prudent."[63]

DRA emphasizes the need to ensure that a realistic cost cap must be in place to encourage cost containment by MCWD. DRA is particularly troubled by the fact that cost cap proposed in the Settlement Agreement is a capital cost cap, and therefore does not establish any limits on the O&M costs, litigation, costs, and other project-related expenses. DRA explains that the O&M costs are usually two-thirds of total costs of desalinated water, with approximately half of this amount allocated to the cost of energy.[64]

DRA recommends that MCWD be required to pay its full 16.2% fair share of costs such as O&M and litigation costs as an incentive to keep those costs reasonable.[65] DRA explains that the WPA provides that MCWD pays only its share of the costs for pumping and treating groundwater – costs that MCWD pays today and are currently equivalent to $148 per acre-foot. DRA believes that this approach does not result in MCWD acting as a partner in the Regional Project, with a proportional share in the cost and benefits of a regional partnership. Instead, "MCWD will be insulated from the actual costs to produce desalinated water and will have little incentive to control these costs, because it will be safe in the knowledge that actual costs will be borne by a group without voice or recourse under the terms of the agreement – the Cal Am ratepayer."[66]

---

[63] DRA Opening Brief at 6, citing Settlement Agreement at § 10.1.

[64] DRA Opening Brief at 8, citing Exhibit 204 at 18. Bureau of Reclamation (BOR) points out that annualized capital costs for this project exceed this formula.

[65] Id.

[66] DRA Opening Brief at 12.

While MCWD contends that it has no immediate plans to take its Permanent Allocation and therefore has no need for the desalinated water, DRA disagrees. DRA argues that MCWD will eventually need this water to serve the former Fort Ord community, as that area is developed, and points to MCWD's testimony that water planners need to stay one step ahead of the supply. DRA thus recommends that MCWD pay its proportional 16.2% share of project capital costs, reserves, financing, and O&M costs of the Regional Project facilities. The 16.2 % allocation is derived from MCWD's 1700 afy permanent allocation. DRA states that litigation and O&M cost would be capped if the Commission adopts its recommended $2,200 per-acre-foot cost cap, because DRA's proposed cap applies to all costs.

DRA also states that MCWD's contribution to the project via the connection fees it will charge to new connections must not be capped at or limited to $22 million. DRA contends that such an approach is indefensible since MCWD has stated that it would need to spend $42 million in estimated capital costs to construct its own desalination facility.[67] DRA believes this approach is patently unfair and contends that at a minimum, the Commission must eliminate the pre-determined fees limit in the Water Purchase Agreement of $22 million. MPWMD agrees and argues that a "common doctrine among capital projects with multiple participants is that each party pays costs proportional to their usage of the project output."[68] Because MPWMD further contends that MCWD is likely to need additional water in the next 10 to 20 years, MPWMD recommends that the MCWD fees limit definition be revised to reflect the fair

[67] DRA Opening Brief, citing Exhibit 201 at i.

allocation of costs of indebtedness to MCWD, plus the value of any grants or fees used to reduce the original issuance of indebtedness.

MPWMD also contends that certain existing groundwater wells that currently supply MCWD's customers may be subject to potential contamination from seawater intrusion and groundwater plumes. Because MCWRA will install groundwater monitoring wells, MPWMD contends that MCWD will derive additional benefits from such monitoring. Finally, MPWMD contends that MCWD's participation in the Regional Project will avoid use of groundwater pumping and will therefore reduce the deterioration of its wells.[69] Again, MPWMD contends that these are benefits to MCWD that have not been quantified or valued.

MPWMD concurs that the Commission must retain its authority to review the reasonableness of the Regional Project financing and expenditures, and that such costs cannot be deemed to be reasonable. MPWMD argues that MCWD is receiving benefits from the Regional Project that it is not paying for. Both DRA and MPWMD explain that because MCWD planned to construct a stand-alone desalination project, and because that project then evolved to the REPOG, which, in turn, led to the Regional Project, the capital cost of that desalination plant should now be considered to be a benefit to MCWD.[70]

DRA also contends that there are ways to reduce the capital costs of the project, based on a study they commissioned from the Bureau of Reclamation BOR. We review the technical issues raised and address these recommendations

---

[68] MPWMD Opening Brief at 22.

[69] Id. at 29.

[70] Id.

below. We address recovery of the costs associated with MCWD's proposed stand-alone plant in Section 13.3.1.

11.2.1. Discussion: Cost Controls and Determination of Reasonable and Prudent Costs

As we stated earlier, there is no doubt that there is a need for replacement water on the Monterey Peninsula. We recognize that the desalinated water will be expensive and acknowledge DRA's recommendation to establish an all-inclusive unit cost cap. Based on the record before us, we cannot find that a $2,200 per-acre-foot cost cap is reasonable or would serve the public interest, because the evidence does not demonstrate that DRA included all necessary costs associated with desalination plants in developing its estimated cost cap.[71] Indeed, we agree with the Settling Parties that such an approach would serve to squelch financing opportunities.[72]

We are persuaded that the Public Agencies bring benefits to the Regional Project that would not be achieved by Cal-Am ownership of either the Moss Landing Project or the North Marina Project. The preponderance of the evidence demonstrates that MCWD does not need the desalinated water now, nor is it clear when it may be needed. We are further convinced that there are reasonable checkpoints built into the Water Purchase Agreement to ensure that Cal-Am will receive its needed allocation of water. While MPWMD is concerned about expansion of the Regional Project, we are persuaded that this is an issue that can be dealt with adequately in the future. Our initial concerns are ensuring that the Regional Project can be permitted and constructed.

---

[71] Exhibit 319 at 26-28.

[72] Exhibit 319 at 29, RT 1059 at 4-7.

Cal-Am explains that the $297.5 million proposed capital cost cap represents the Settling Parties' diligent and through approximation of the various cost components of the Regional Project facilities.[73] The costs set forth in Exhibit C of the WPA are based on the assumption that slant wells will be used as the source water intake facilities – an assumption that DRA recommends. Exhibit 320 sets forth the most comprehensive and updated assessment of costs of the various projects.[74] The various components of the project have been assessed and analyzed in various forums and the parties – while perhaps not agreeing – have certainly had the opportunity to understand and debate the derivation of the cost components. The following table is useful:[75]Table 2: Comparison of Cost Estimates of Project Alternatives ($2012)

	Regional Project (assumes vertical wells)	Basis of Exhibit C (assumes slant wells)	North Marina	Moss Landing

[73] Cal-Am Reply Brief at 9.

[74] Exhibit 320 at 2.

[75] Based on the most probable estimated costs, Exhibit 319 at 13 and MCWD Opening Brief at 44.

	Regional Project (assumes vertical wells)	Basis of Exhibit C (assumes slant wells)	North Marina	Moss Landing
Escalated Capital Costs				
Intake Wells and Pipeline	$17,400,000	$26,300,000	$23,200,000	$2,000,000
Desalination Facility	$95,100,000	$95,100,000	$98,500,000	$119,700,000
Product Water Pipeline (To CAW Delivery Point)	$13,700,000	$18,700,000	$13,700,000	$31,100,000
Base Construction Cost	**$126,200,000**	**$140,100,000**	**$135,400,000**	**$152,800,000**
Post -Effective Date Implementation Costs	$21,800,000	$25,500,000	$23,400,000	$25,400,000
Project Administration and Oversight Expenses	$3,000,000	$3,000,000	$3,000,000	$3,000,000
Start-up and Acceptance Costs	$4,000,000	$4,000,000	$4,000,000	$4,000,000
Pre-Effective Date Costs and Expenses	$14,000,000	$14,000,000	$14,000,000	$14,000,000
MRWPCA Outfall Capacity Charge	$3,000,000	$3,000,000	$3,000,000	$-
Right of Way Easements and Land Acquisition	$2,000,000	$2,000,000	$2,400,000	$4,800,000
Environmental Mitigation Measures Costs	$2,000,000	$2,000,000	$2,000,000	$10,000,000
Litigation associated with Land Condemnation and Groundwater Transfer out of Zone 2C			$5,000,000	
Capital Costs (Excluding Contingency)	$176,000,000	$193,600,000	$192,200,000	$214,000,000
Project Contingency (25%)	$42,300,000	$46,700,000	$46,300,000	$51,800,000
MCWD Buy-In From Fees	$(22,000,000)			
Most Probable Capital Cost with Contingency	**$196,300,000**	**$240,300,000**	**$239,000,000**	**$266,000,000**
Estimated Total Annual O&M	$12,900,000	$12,500,000	$13,300,000	$13,000,000

MCWD's Witness Melton explains that the costs in Exhibit C to the WPA were created to establish an upper cost limit and differ from the costs shown in the cost estimates developed in Exhibit 320:

> The basis for the Exhibit C costs is included in the April 15, 2010 Project Cost Comparison. The costs included in Exhibit C assume that the intake facilities will include all slant wells, that there will be a different connection point for introduction of the desalinated water in the MCWD distribution system that requires a 12,750 foot long, 24-inch diameter MCWD tie-in pipeline, that there will be no MCWD buy-in fees, and that the costs will be at the high end of the cost estimating range as established by the Association for the Advancement of Cost Engineering (AACE). The resulting cost estimate included in Exhibit C is $240 million for the most probable cost, and $282 million at the high end of the accuracy range. These costs include all costs of the Regional Desalination Project except the costs of the CAW facilities (i.e., they include the costs to deliver desalinated water to the Delivery Point, or otherwise stated, all project costs upstream of the Delivery Point). The Exhibit C costs in the WPA also include $15 million for the Reserve Fund Payment Account and the costs of obtaining indebtedness, bringing the total Exhibit C costs in the WPA to $297 million.[76]

[76] Exhibit 319 at 6-7.

Although the most probable cost estimate may be $240 million, we believe that it would be more appropriate to set a capital cost cap at the upper cost limit of $297.5 million. We are concerned that adopting a lower cost estimate could constrain the Settling Parties' ability to obtain financing at a reasonable interest rate. Further, despite adopting this upper limit, we anticipate that the ultimate cost for the project will come in lower. For example, as the former Fort Ord community is developed, connection fees shall be applied to offset the indebtedness that Cal-Am ratepayers are funding. As witness Melton stated in Exhibit 319, "The MCWD Buy-in from Fees contribution will serve to reduce the annual debt payment and the associated cost of water to ratepayers. . ."[77]

Table 2 is included to show the estimated costs of each component of the Regional Project facilities. We fully expect that Settling Parties will adhere to the estimated cost projection as outlined.

DRA and MPWMD dispute whether the Regional Project is, in fact, the most cost-effective of the three alternatives studied in the FEIR. Based on the cost to the delivery point (where Cal-Am would receive the desalinated water) and the various scenarios analyzed by all parties using the agreed-on Unified Financing Model,[78] the cost of desalinated water (excluding the cost of the Cal-Am facilities) ranges from $3,200 to $5,600 per acre-foot for the Regional Project. The scenarios are set forth in Exhibit 113 and are based on varying capital costs ($227.3 million to $297.5 million), debt service coverage

---

[77] Exhibit 319 at 23.

[78] The Unified Financing Model was based on DRA's recommended approach to analyzing revenue requirements and was jointly developed by the parties during the May 2010 workshops.

(1.0 or 1.25), cost of debt (4.79% to 6%), and length of construction period (3.5 years to 4.5 years). If favorable financing were not obtained, the construction period lasted 4.5 years, and the maximum capital cost is assumed, the Regional Project could cost $8,000 per acre-foot.[79]

The cost for desalinated water for the North Marina Alternative and the Moss Landing Project ranges from $6,992 to $8,208 and $7,580 to $8,930 per acre-foot, respectively. An additional $1,300 to $1,500 per acre-foot for the Cal-Am facilities (depending on whether the costs of those facilities are capped at $95 million or $106.8 million) must be added to each Project for a true cost comparison.[80]

Cal-Am has also asked the Commission to consider the issue of debt equivalence in a separate proceeding. To the extent that an additional increment must be added in for the costs associated with debt equivalence, Cal-Am estimates that amount to be equivalent to $14.3 million.[81] Although we do not consider either the issue or the amount associated with debt equivalence here, DRA recommends that we add $1,600 per acre-foot to truly consider the costs of the Regional Project.[82] Because we do not know how the issue of debt equivalence will be decided, it is speculative to consider the potential impacts of this calculation. However, even *arguendo*, if we were to assume that an amount for debt equivalence is authorized and added into this equation, the total

---

[79] In Section 11.3.1, we provide further discussion on the impact of various financing options, based on Appendix D, which is based on the various scenarios in Exhibit 113.

[80] Exhibit 319 at 24.

[81] Exhibit 202 at 4-34, citing Cal-Am Data Request Response CWP 54-2(a).

[82] Exhibit 202 at 4-34.

estimated costs of the Regional Project range from $5,700 to $8,100 per acre-foot and in a worst-case scenario, could equal over $10,000 per acre–foot, as compared to a total range of $8,492 to $9,708 for the North Marina Alternative (assuming a total cost cap of $106.875 million for the Cal-Am facilities).[83]

While we cannot agree with the Settling Parties that the Regional Project is clearly the least-cost alternative, we do agree that it is the only feasible project that will ensure a replacement water source in a timely manner, i.e., prior to the enactment of the Cease and Desist Order provisions. Cal-Am no longer supports the Moss Landing Project, because of concerns regarding once-through cooling and how this intake technology would impact permitting. The Settling Parties have consistently referred to problems associated with Cal-Am ownership due to Monterey County Ordinance 10-20, which prohibits private ownership of a desalination plant. MCWD and MCWRA have also pointed out the likely litigation that would ensue if Cal-Am elected to pursue the North Marina Alternative, since MCWD has exercised its option to purchase the land on which the desalination plant would be sited, and MCWRA would have to ensure that

---

[83] DRA argues that the costs included in Table 2 for the Moss Landing Project and the North Marina Project are overstated by $14 million in pre-effective date costs for the Public Agencies, and notes that litigation costs are included only for the North Marina Project. These particular litigation costs appear to be associated with land condemnation and groundwater transfer out of the Salinas Basin (Zone C). If we removed the pre-effective date costs from the North Marina and Moss Landing Projects, the estimated costs of those projects would be reduced to $225 million and $252 million, respectively. If a litigation cost estimate were then added to each project, the estimated cost for the Regional Project with vertical wells would increase to $201.3 million, Regional Project with slant wells would increase to $245.3 million as compared to the North Marina Project ($225 million with adjustments) and the Moss Landing Project ($257 million, with adjustments). As we discuss, we must consider both the feasibility of constructing these projects in a timely way as well as the costs of the project.

the Agency Act is upheld. Because of the terms of the Settlement Agreement and the WPA, the question before us becomes a determination of whether the cost of this major water infrastructure project is so expensive that the ratepayers cannot bear these costs.

The Commission has a constitutional requirement to actively supervise and regulate public utility rates, as well as a statutory requirement under Pub. Util. Code §§ 451, 454, and 728 to ensure that rates are just and reasonable.[84] As discussed in D.03-12-035, "[t]he regulation of utilities is one of the most important of the functions traditionally associated with the police power of the states."[85] As the Commission determined in D.03-12-035, the Commission cannot be powerless to protect ratepayers from unjust and unreasonable rates during the term of a settlement. Here, we must determine whether the terms and conditions of the Settlement Agreement and Water Purchase Agreement and the existing processes of the Public Agencies will ensure that rates to be imposed on Cal-Am ratepayers will be just and reasonable. We conclude that a replacement water source must be provided, and that full compliance by the Public Agencies with their contractual and legal obligations in the Implementing Agreements and with the procedural and other legal constraints imposed on them by law, offers reasonable assurance that a just and reasonable, least cost solution will be achieved. In addition, this Commission retains full authority over the activities of Cal-Am, will receive regular reports, and will have an opportunity to review any financing plan, just as the Boards of the Public Agencies will have.

---

[84] D.03-12-035 at 27, citing *Sale v. Railroad Commission* (1940) 15 Cal. 2d y07 at 617 and *Camp Meeker Water System, Inc. v. Public Utilities Com.* (1990) 51 Cal.3d 850 at 861-862.

[85] Id, citing *Arkansas Electric Coop. v. Arkansas Pub. Serv. Comm'n* (1983) 461 U.S. 375, 377.

As Public Agencies, both MCWD and MCWRA are subject to the requirements of the Brown Act (Government Code Sections 54950 et seq.) and the California Public Records Act (Government Code Sections 6250 et seq.) The Brown Act guarantees the public's right to attend and participate in meetings of local legislative bodies, including county government agencies, boards and councils, while the California Public Records Act mandates disclosure of governmental records to the public upon request, unless there is a specific reason not to do so. Both of these statutory provisions ensure the transparency of decisions made by these agencies.

Under the Agency Act, MCWRA's budget is subject to public hearings when it is being prepared by the Board of Directors as well as when it is presented to the Board of Supervisors for adoption. This two-step process would allow for the public and Cal-Am ratepayers to participate in the process and challenge costs associated with the Regional Project before they are approved by MCWRA. Similarly, MCWD is required to utilize and "follow a public process involving notice and hearings in adopting rates, fees and charges, and to fix water rates that are reasonable and fair and related to costs."[86] Additionally, Article XIII, § 6, subd. (b) of the California Constitution establishes the requirements by which MCWD may set its fees or charges for service to its ratepayers. This includes the requirement that the fees or charges only be set at the cost to provide the related service. Further, the Water Purchase Agreement establishes the procedures by which costs shall be determined and contains terms and conditions requiring that these costs be just and reasonable. These

[86] Exhibit 361 at 4.

requirements, combined with the requirement that MCWD may not discriminate between the rates charged to its ratepayers and Cal-Am ratepayers, ensure that the costs to be imposed on Cal-Am ratepayers are just and reasonable.

The processes and requirements by which MCWD and MCWRA will review and adopt costs associated with the Regional Project are similar to the ones utilized by the Commission. As such, we conclude that if the Public Agencies fully comply with their established processes and with the statutory and constitutional requirements, we deem the resulting costs to be just and reasonable.

While the Settling Parties have stated concerns that establishing a capital cost cap could impact the competitive bidding process and could also impact the cost of financing, they acknowledge that a capital cost cap is one way to ensure that the Settlement Agreement is in the public interest. We concur, and adopt the $297.5 million estimated cost cap presented in Exhibit C of the WPA.

DRA is concerned that such an approach will violate the Commission's requirement to approve just and reasonable rates, as set forth in Pub. Util. Code §§ 451, 454, and 728. DRA contends that a per-acre-foot cost cap is the only approach that will allow the Commission to set just and reasonable rates. Based on the record developed in this proceeding, we do not agree that the cost-per-acre-foot proposed by DRA is reasonable. At this point, we are not setting rates in this proceeding and we have established that the cost allocation and rate design will be assessed in a separate phase. We are quite cognizant of the costs of this major addition to the infrastructure on the Monterey Peninsula, and we will encourage parties to thoroughly assess cost allocation and rate design methodologies that can be considered to protect Cal-Am's customers. Certainly, the Settling Parties have recognized that at a minimum, it may be appropriate to

expand the approach to serving low-income customers.[87] We look forward to developing the record further on this issue and considering proposals to ensure that rates remain affordable for those who can least afford rate increases. Because a significant increase in rates may well affect demand, Phase 3 of this proceeding will be the appropriate forum to consider elasticity of demand and various protections that must be put into place.

It is certainly true that the capital costs, annual operating costs, financing costs, and utilization factor must all be considered in calculating the unit cost of water.[88] However, we are not persuaded that setting a very low per-acre foot cost cap will appropriately protect ratepayers. Even the lowest-cost scenario developed jointly by the parties estimate a unit cost of $2,600 per acre-foot (excluding Cal-Am facilities, but including the cost of delivery to the Cal-Am receiving point). This amount is based on a capital cost of $204.3 million (which assumes a project cost of $227 million and then deducts the $22 million from MCWD buy-in fees) and is still $400 per acre-foot over the amount proposed by DRA. Excluding the Cal-Am facilities, we note that the $297.5 million capital cost that we impose today will yield a per-acre-foot cost of approximately $6,300, assuming that the Settling Parties can obtain the low-cost financing contemplated (and not including federal grants). Given these scenarios, we do not find that the per-acre-foot cost cap proposed by DRA is viable. If we were to adopt DRA's proposal, we suspect that Cal-Am would soon be before us with a new

---

[87] Settlement Agreement, § 10.6 at 16.

[88] Exhibit 319 at 13-14. Exhibit 204 at 16 discusses the utilization factor and explains that increasing plant utilization (as BOR recommends) is a way to reduce the unit cost of water.

application seeking relief. While DRA contemplates that such actions are expected, we prefer to start with a realistic view of the capital costs that will lead to viable financing opportunities and timely completion of the Regional Project.

The Commission will take a strict view before allowing cost recovery for amounts greater than $297.5 million. Unforeseen and unknown costs will be the sole burden of Cal-Am unless it is demonstrated that these costs were due to extraordinary circumstances. Since large contingency amounts are already accounted for in the capital cost cap, the burden for recovering any amounts above the cost cap ceiling will be high.

The Legislature has determined that the "state's limited water supply will require investment by water corporations in infrastructure, plant, and facilities to develop new sources of supply, make existing uses of supply more reliable and encourage and implement water conservation measures including water reclamation and reuse." (Pub. Util. Code § 789.1(c).) We find that the infrastructure associated with the Regional Project is required to ensure that Cal-Am can continue to provide adequate water supplies and service to its customers. This approach is also consistent with the requirements of § 1005.5, which we look to for guidance, as DRA suggests. Finally, we find that the cost saving measures proposed by BOR and DRA must also be considered in light of the full report prepared by BOR. We discuss these issues under Technical Requirements, Section 12, below.

DRA and MPWMD also contend that MCWD must contribute 16.2% of the debt service and O&M costs in order for the Regional Project to be fair and equitable to Cal-Am ratepayers. Here, we consider the benefits derived by Cal-Am and MCWD. In MCWD Exhibit 326, witness Berkman testifies:

> CAW enjoys cost savings of $127 million on a present value basis by participating in the Regional facility rather than the North Marina project. This savings is attributed to scale economies, lower processing costs and MCWD's capital contribution. This corresponds to Lyndel Melton's Scenario 2 cost estimate[89]. . . Accounting for low cost municipal financing that would not be available absent MCWD participation results in savings of $493 million. Accounting for this financing and State Revolving Fund (SRF) funding and grants, savings grow to $578 million. This corresponds to Lyndel Melton's Scenario 6[90]. . . At the same time, MCWD's savings are very modest. Economies of scale and process savings total about $7 million. Accounting for financing, MCWD's benefits total $27 million.
>
> Overall, MCWD's benefits are much lower than CAW's benefits because MCWD does not need desalination project water for an extended period – perhaps ten years or more – and as a consequence the savings must be discounted accordingly.[91]

Berkman concludes that Cal-Am obtains over 90% of the benefits of the Regional Project, as compared with the North Marina Alternative, while MCWD obtains approximately 5% of the benefits from implementing the Regional desalination facilities rather than its stand-alone desalination facility.[92]

Both DRA and MPWMD dispute this assessment and contend that MCWD should be required to fully pay their proportionate share of debt service, without regard to the sufficiency or limits of the fees. MPWMD suggests that MCWD should contribute a fees "target" rather than a fees "limit." MPWMD calculates

---

[89] Exhibit 319 at 23.

[90] Id.

[91] Exhibit 326 at 4-5.

[92] Id.

that a target on the order of 13 to 15% of the bonded indebtedness is reasonable, assuming that MCWD would need the desalinated water in ten to twenty years.[93] DRA recommends that MCWD contribute 16.2% toward project debt service, based on its permanent allocation of 1,700 afy.

Based on MPWMD's analysis, the MCWD fees contribution is approximately 5-7%.[94] The $22 million estimated amount to be contributed by MCWD approximates the 5% benefit that MCWD enjoys from participating in the Regional Project.[95] The Settling Parties also agree that the fees limit is "not actually a cap." MCWD states that § 11.4(c) of the WPA is intended to "make it clear that any fees that MCWD collects in the ordinary course of business that were originally earmarked for use towards 'water augmentation through capital facilities for desalination' by MCWD will also be applied to reduce the Product Water costs of the Regional Desalination Project (RDP)."[96] We agree with the concept. The fees to be contributed by MCWD are expected to provide the maximum economically-feasible benefit that is fair and reasonable.

11.3. Financing and Debt Equivalence

MCWD and MCWRA state that they will work assiduously to obtain low-cost financing that may be available to these Public Agencies, and is not available to Cal-Am. Such financing includes tax exempt private activity bonds, State Revolving Fund (SRF) loans, and state and federal grants. This lower-cost

---

[93] Exhibit 600 at 8. If MCWD did not need its permanent allocation until 30 years from the date of operation, then MPWMD estimates that its proportionate share of debt service would be 11%.

[94] MPWMD Opening Brief at 23.

[95] MCWD Reply Brief at 9.

[96] MCWD Reply Brief at 9-10.

financing would be applied to the desalination plant and related facilities, as well as the brackish source wells and associated facilities. Cal-Am will obtain financing for the costs and expenses related to the development, design, permitting, construction, and testing of the Cal-Am facilities. Cal-Am has also committed to expend "reasonable efforts" to obtain the best available financing for the Cal-Am owned facilities.

The Parties to the WPA plan to finance all costs included in the Project Facility Estimated costs, including initial capital costs, pre-effective date costs and expenses, preconstruction development, permitting fees and expenses, and pre-acceptance defense costs. If, however, there is a shortfall, parties will meet and confer to determine whether it would be cost-effective to issue subordinated debt (i.e., unsecured debt or debt that is junior to the primary indebtedness) for a portion of the project.

If there is not a less costly method of obtaining financing of any shortfall, the WPA provides that Cal-Am or an affiliate will loan up to $17.5 million to MCWD or MCWRA. In addition, Cal-Am or an affiliate will make available a credit line of $8 million and a $12 million letter of credit to manage short-term financial liquidity needs of MCWD or MCWRA. The WPA sets forth the terms of each of these financing instruments and states that such financing is unsecured, subordinate indebtedness, but that the credit line is senior to the Cal-Am loan. Neither of these amounts is intended to increase the capital cost cap established in Exhibit C of the WPA.

Section 7.1 (c)(iv) provides that our approval of the WPA establishes that we have authorized the financing and deemed the terms set forth in §§ 7.1(c)(i), (ii), and (iii) as reasonable and prudent. The WPA further provides that to the extent such costs are not recovered in the price of the Product Water, the

principal and interest shall be recoverable in rates. In other words, MCWD and MCWRA will repay the loans, but the costs of such repayment will be passed onto Cal-Am's ratepayers.

The Settling Parties also request that the Commission ensure that this transaction does not impact Cal-Am's financial condition or its credit rating and therefore request that the Commission ensure Cal-Am's financial well-being. Cal-Am explains that these findings are necessary to ensure that Cal-Am's "financial viability is not harmed as a result of the project, that the project can move forward, and that the public agencies are able to finance the project at reasonable rates based upon California American Water's stand-alone credit rating."[97]

Cal-Am argues that these findings are required under Pub. Util. Code § 727.5(e), which, in relevant part, provides that in establishing rates for recovery of the costs of used and useful water plant, the Commission is to maintain the reliability of water service, minimize the long-term cost to ratepayers, provide equity between present and future ratepayers, and provide the utility an opportunity to earn a reasonable return on its used and useful investment, to attract capital for investment on reasonable terms, and to ensure the financial integrity of the utility.

Because the Water Purchase Agreement is structured such that Cal-Am essentially commits future cash flows to funding the debt committed to the Regional Project, Cal-Am testifies that the WPA will be considered either a capital lease or an off-balance sheet take-or-pay contract by its external auditors

[97] Cal-Am Opening Brief at 52.

and that rating agencies will impute debt and consider such leveraging in their analysis and rating of Cal-Am.[98] Cal-Am therefore contends that the increased debt (approximately double the current amount on its books) would lead to higher debt costs on both the Regional facilities and the Cal-Am facilities and that its customers outside the Monterey County District could ultimately be required to pay for the increased cost of capital, if Cal-Am's credit rating is impacted. According to Cal-Am Treasurer Kalinovich, this is so because of Cal-Am's commitment to purchase the majority of product water from the Regional Project, which then leads to Cal-Am being recognized as the primary "off-taker" of the Regional Project by the rating agencies:[99]

> In addition to considering the off-taker's credit rating, the rating agencies will consider the impact of the transaction, as either a capital lease or a take-or-pay contract, on California American Water in calculating the credit metrics of California American Water for purposes of financing the project. While the parties to the WPA will use reasonable efforts to obtain the maximum amount of financing on the best terms, it is reasonably possible that the cost of financing the project could range as high as nearly 9 percent. (footnote omitted.) The lenders would likely add a 75 basis point premium to the project financing, consistent with the rating agencies' cap of the overall rating of the project at two notches below the off-taker rating. (footnote omitted.) Thus, "given California American Water's position as the off-taker, the rating agencies would adjust the credit worthiness of the project if California American Water's credit rating is below the typical range, and thus the project financing would depend largely upon California American Water's credit quality."[100] As such, the

[98] Exhibit 101 at 4, Exhibit 11 at 6-7.

[99] Cal-Am Opening Brief at 56, citing RT at 1609.

[100] Id. at 57, citing Exhibit 111 at 5.

> Settling Parties have recognized that it is critical for the Commission to address the financial viability of California American Water as a result of the transaction."[101]

Thus, Cal-Am and the Settling Parties argue that the Commission must ensure that the transaction does not impact Cal-Am's financial viability on a stand-alone basis. Without such assurance, Cal-Am contends that the utility could be rated as BB or lower on a stand-alone basis and that the long-term interest rate for the Regional Project could be imputed at 8.67%. Because a bond of this rating is considered "junk" in terms of investment grades, Cal-Am fears that it could lose the ability to reliably access capital markets at reasonable rates. Cal-Am asserts that it cannot rely on the rating of its parent company, American Water Company.[102]

DRA and MPWMD raise strong concerns about the potential cost impact of the debt equivalence issue. While DRA does not object to the use of least-cost financing, DRA is concerned that any advantages that the Public Agencies may obtain by accessing lower cost financing tools may be eroded by a premature assertion that the Commission will guarantee Cal-Am's financial viability. DRA argues that the financing must be reviewed by the Commission, to the extent that such financing leads to costs per acre-foot greater than its recommended $2,200. DRA points out that a finding regarding debt equivalence and financial viability could lead to an additional $14.3 million in revenue requirements, which would equal additional costs of approximately $1,600 per-acre-foot.[103] MPWMD

---

[101] Id.

[102] Id. at 58.

[103] Exhibit 202 at 4-34.

recommends that the Commission should not affirm Cal-Am's financial viability with regard to the debt equivalence issue, but simply acknowledge that the issue exists and will be litigated in the future.

11.3.1. Discussion re: Financing and Debt Equivalence

The low-cost financing opportunities that the Public Agencies should be able to access are at the core of the benefits of the Regional Project. We are pleased that DRA and MPWMD do not dispute that these are important provisos of the Settlement Agreement and the WPA, although these parties are concerned about the lack of a financing plan and the potential impacts on costs to Cal-Am ratepayers. We understand that Cal-Am is essentially providing "backing" to the Regional Project while the financing plan is being developed and the Public Agencies are able to access funding sources.

It is reasonable to assign benefits to the Public Agencies' participation in the Regional Project, although those benefits cannot be quantified precisely at this time. The Settling Parties acknowledge that a financing package is not finalized and explain that they are evaluating several options for obtaining a financing package that will reduce the costs of indebtedness: 1) MCWRA and MCWD are exploring issuing Private Activity Bonds through the California Pollution Finance Authority to fund the entire indebtedness necessary for construction of the Project facilities, the interest accrued on indebtedness during the construction period, and the reserve funds required to sell these Private Activity Bonds; 2) the Public Agencies are considering issuing the Private Activity Bonds in tranches as the funds are needed for construction. This approach would result in a reduced level of interest during construction and thus a lower overall cost of desalinated water; 3) the Public Agencies are considering issuing Private Activity Bonds through the California Pollution

Finance Authority in an amount necessary to provide initial funding for the Project facilities and would borrow from the SRF loan facility in tranches as the funds are needed (SRF funding could also be used as part of Alternative 2); and 4) the Public Agencies are considering potential use of grant funding under BOR's Title XVI Grant Program. This grant funding could result in a total grant amount of $20 million in grants allocated to both the source water facilities and the desalination facilities.[104]

It is our understanding that the Settling Parties intend to analyze the final financing package at the end of 2010 and will advise their Boards to approve a package based on the total amount of funding and the cost of the funding, including interest rate, term, reserve requirements, flexibility, and any restrictions imposed by particular financing alternatives.[105] Use of low-interest SRF loans and federal grants would reduce indebtedness. Any financing alternative that reduces the Project indebtedness will flow through to and benefit Cal-Am ratepayers by reducing the cost of the desalinated water. While use of SRF and grant opportunities are not guaranteed, Cal-Am would not have the ability to access such funding opportunities. This is a potential benefit to ratepayers that we cannot ignore.

Based on the Unified Financing Model the parties jointly developed, Exhibit 113 considers the impact of a single issuance of private activity bonds, issuance of tranches of private activity bonds, and the interaction of such bonds

---

[104] Exhibit 319 at 16.

[105] Id. at 17. Based on the legal requirements for the Public Agencies, our understanding is that their respective boards must approve the financing plan ultimately recommended for the Regional Project.

with SRF loans and federal grants, various interest rates, and a length of construction ranging from 3.5 years to 4.5 years for a range of capital costs. We have replicated this model in Appendix D.

The ALJ's Proposed Decision modeled a "best case" and a "worst case" scenario in its analysis of cost-per-acre-foot and revenue requirement. These scenarios are presented in Appendix D. Based on its assumptions, the ALJ's Proposed Decision projected the cost of water to Cal-Am customers to range from $4,814 to $10,592 per acre-foot and incremental revenue requirements for 2015 after the plant addition to range from $ $44.14 million to $95.27 million.

Under the Modified Scenarios considered in this decision, the total cost-per-acre-foot is $ $6,272 and $6,303 based on 3.5 and 4.5 years of construction respectively and the incremental revenue requirement for 2015 will be approximately $57.23 million and $57.51 million respectively. The Modified Scenarios assume the Regional Project facilities are built for the capital cost cap of $297.5 million, the Cal-Am facilities are constructed for the capital cost cap of $106.875 million, debt service coverage is 1.25, and the Public Agencies are able to access the low cost SRF financing.

As DRA points out, the capital cost cap does not include costs associated with interest during construction or the required debt coverage. The drivers in the sensitivity analyses are the length of the construction period, the debt-coverage ratio required by the lender, and the assumed aggregate rate of indebtedness.[106] DRA has assumed a construction period of 4.5 years, an average bond financing rate of 6% (based on the lower of American Water Works

[106] Id. at 4-27-28.

Company bond ratings of BBB+ by Standard & Poor's and Baa2 by Moody's), and a debt-coverage ratio of 1.25%. Based on the Settling Parties' requested capital cost estimates and these admittedly conservative assumptions, DRA calculates the first year revenue requirement at approximately $69 million.

The revenue requirement increase associated with the Coastal Water Project will be undeniably costly. When the Regional Project is completed and the costs of product water are charged to ratepayers, the revenue requirement for the Monterey District ratepayers could increase by approximately 81% under the Modified Scenarios, as compared to the anticipated trend in current revenue requirements (without the Regional Project additions).[107] Settling Parties do not dispute the costly nature of this project, although they focus on the best case scenarios in assessing the costs to Cal-Am ratepayers. DRA is understandably concerned about the impact of such costs on ratepayers, and has proposed the cost-per-acre- foot metric in order to ensure that all costs are included and that the cost impact on ratepayers can be minimized.

DRA's concerns are well-taken, but we cannot agree that the proposed cost-per-acre-foot of $2,200 is a viable amount that will allow this project to go forward. We are faced with a difficult choice, but we are persuaded that even the revenue requirement implied by the worst case scenario is likely preferable to the severe water rationing and restrictions that would be imposed by the Cease and Desist Order. However, we cannot delegate our duty to balance the need for additional water and the impact on ratepayers, pursuant to Pub. Util. Code § 701

---

[107] Exhibit 202 at 5-38 states that 2009 revenue requirement for the Monterey District is $42.7 million. Based on the 9% revenue growth rate included in the Unified Financing

Footnote continued on next page

and the California Constitution, Article 12.[108] As discussed above, if the Public Agencies fully comply with the terms and conditions of the Settlement Agreement and Water Purchase Agreement, as well as the legal and constitutional requirements imposed on them, the processes and disciplines inherent in that process lead us to conclude that costs approved by the Settling Parties will be just and reasonable.

As we observed above, it is our understanding that the Public Agencies will be submitting their financing plans to their respective Boards for approval, which approval process provides for widespread public participation. We require Cal-Am to file and serve that plan in this proceeding. To the extent that these agencies, in exercising their duties to be accountable to their constituencies, find that particular aspects of the Regional Project are not reasonable and cost-effective, then Cal-Am must bring this issue to the Commission for its review and consideration, by filing the appropriate pleading. The assigned Commissioner and ALJ will then determine how to proceed, in order to ensure that the Commission can consider the financing plan in a timely way.

We also agree with DRA and MPWMD that it is premature to weigh in on the debt equivalence issue at this time. Cal-Am needs to obtain more information before it files an application addressing this issue. We understand the importance of the issue, given the financial footprint of Cal-Am and the relative size of the obligations being undertaken, and we are fully cognizant of

---

Model assumptions, the revenue requirement without the plant addition is $70.4 million in 2015.

[108] The Commission is not an ordinary administrative agency, but a constitutional body with broad legislative and judicial powers. (Southern California Edison Company v. CPUC (102 Cal.Rptr.2d 684.))

the need for the investor-owned utilities we regulate to remain financially viable, as set forth with particularity in Pub. Util. Code Sec. 727.5(e):

> In establishing rates for recovery of the costs of used and useful water plant, the commission may utilize a capital structure and payback methodology that shall maintain the reliability of water service, shall minimize the long-term cost to ratepayers, shall provide equity between present and future ratepayers, and shall afford the utility an opportunity to earn a reasonable return on its used and useful investment, to attract capital for investment on reasonable terms and to ensure the financial integrity of the utility.

Because we must balance the needs of ratepayers and shareholders, it is reasonable to consider the issue of debt equivalency when we can develop a full record, as the Settling Parties have acknowledged. Section 5 of the Settlement Agreement provides, in relevant part: "The Parties acknowledge that the financial well-being of CAW is essential to the ability of MCWD and MCWRA to issue bonds. The Parties therefore agree that the Commission should take steps to ensure CAW's financial well-being in a subsequent proceeding. Such proceeding shall only be initiated once CAW determines after appropriate analysis the accounting treatment for its commitment under the WPA."[109] We find that no modifications are required with regard to the debt equivalency issue. When Cal-Am files the appropriate pleading, we will address the debt equivalency issue in detail.

11.4. Governance

As amended by MCWD's reply brief, the Water Purchase Agreement provides for the establishment of an Advisory Committee, consisting of

[109] Motion to Approve Settlement Agreement, Exhibit 1, Section 5 at 8.

four members, i.e., a representative of Cal-Am, MCWD, MCWRA, and a "Municipal Advisor." As defined in the WPA, the Municipal Advisor refers to two representatives appointed from time to time by the Cities of Carmel-by-the Sea, Monterey, Pacific Grove, Sand City, and Seaside.[110] This addition further assures that the interests of the ratepayers are fully heard in the deliberations and that the public perspectives of the project are appropriately weighed. Certain limits are placed on the role of the Municipal Advisor and the Cities, including that they are not deemed to be a third-party beneficiary under the Water Purchase Agreement and have no rights as a party to the WPA. In essence, as proposed by the Settling Parties, the Municipal Advisor is an advisory role and would not act as a decision-maker for purposes of the WPA. MCWD, MCWRA, and Cal-Am state that they amended the WPA to recognize the strong desire of the Peninsula ratepayers to have an enhanced participatory role in the Regional Project.

[110] In reply comments to the proposed decision and alternate proposed decision, Cal-Am, MCWD, and MCWRA state that they would not object to the Cities of Carmel-By-The-Sea, Pacific Grove, Sand City, Seaside, and Del Rey Oaks adding the City of Monterey to this group. We encourage the Cities to consider this addition.

The purpose of the Advisory Committee is to provide a formal means for the parties to coordinate the design, permitting, construction, operations, maintenance, repairs, and replacement of the various components of the Regional Project, in consultation with the selected Project Manager. The Advisory Committee members commit to consider, among other things, "the best available scientific evidence relevant to the matter including but not limited to data and analysis generated by numeric models that meet prevailing publicly-owned and privately-owned water utility industry standards for accuracy and reliability, and apply Best Industry Practices."[111]

Parties will also strive to arrive at consensus-driven unanimous decisions regarding construction, operation, and maintenance of the Regional Project facilities. To the extent that is not possible, they have provided for appointment of an independent third party to help them work through the issues. If parties cannot agree on a neutral third-party, they have agreed to submit the selection of the independent third-party to a dispute resolution service, such as the Judicial Arbitration and Mediation Services, Inc.

Section 6.7 of the Water Purchase Agreement also provides for the Establishment of a public Community Involvement Forum to discuss regional water supply issues, including but not limited to, test wells, groundwater modeling, source well type and configuration, construction timelines, progress reports, costs, equity among stakeholders, compliance with public heath considerations, environmental laws, consideration of public trust resources, and compliance with the Agency Act. The Water Purchase Agreement provides for

[111] Id. § 6.2 at 35.

quarterly meetings of the Community Involvement Forum, which shall be open to all members of the public, press, governmental agencies, non-governmental agencies, and elected and appointed officials. The public meetings are to be conducted by Cal-Am, MCWD, and MCWRA on a rotating basis, or with the assistance of a contract facilitator, and the Water Purchase Agreement provides that the meetings are to be held at a facility that is available at no cost or at minimal cost.

DRA recommends that the Commission modify the proposed Settlement Agreement and Water Purchase Agreement to ensure that ratepayers are fairly represented on the Advisory Committee. DRA recommends that both MPWMD and the Monterey Peninsula Cities have a decision-making role on the Advisory Committee. DRA states that it is important for these groups to have voting rights and full Party status under the Water Purchase Agreement, because they possess different areas of technical and managerial expertise and can offer varying political perspectives. DRA contends that such an approach will afford Cal-Am ratepayers the protection they need in considering costs, water quality, opportunities for the sale of desalinated water, expansion parameters to serve the former Fort Ord, and the quantity, timing, and quality of water diverted to the ASR system. DRA notes that while Cal-Am has a fiduciary duty to its shareholders and MCWRA must represent the interests of the agricultural community, the constituencies and interest served by MPWMD and the Monterey Peninsula Cities are also Cal-Am ratepayers.

MPWMD explains that it holds express authority to regulate all local water systems, including the Cal-Am system, particularly regarding integrated water management and conservation. Accordingly, MPWMD recommends that the Advisory Committee should consist of one representative from Cal-Am, MCWD,

MCWRA, and MPWMD. As MPWMD sees it, this would not be a substantive change, since the version of the WPA that was approved by Cal-Am's parent company on March 26, 2010, the MCWD Board of Directors and the MCWRA Board of Directors on April 5, 2010, and the Monterey County Board of Supervisors on April 6, 2010 included MPWMD on the Advisory Committee.[112] After the MPWMD Board voted not to join the Settlement Agreement on April 5, 2010, MPWMD was removed from the Advisory Committee in the Settlement Agreement and Water Purchase Agreement filed with the Commission on April 7, 2010.

MPWMD contends that appropriate governance is needed to protect Cal-Am ratepayers and to address water supply and water management needs of the Monterey Peninsula and the Salinas Valley. Because Cal-Am ratepayers on the Monterey Peninsula directly elect representatives to the MPWMD, the addition of the MPWMD to the Advisory Committee provides the necessary ratepayer protection, in MPWMD's view. In addition, because the Regional Project replaces existing water supply and because MPWMD estimates that approximately 4,500 afy will be needed to meet future water needs in the Monterey Peninsula through 2020, MPWMD contends that it must be on the Advisory Committee to ensure that Monterey Peninsula ratepayers are appropriately represented to ensure that expansion of the Regional Project can be addressed in a viable fashion.

MPWMD also contends that the WPA must be amended to require the Advisory Committee's compliance with the Brown Act (Government Code

[112] MPWMD Opening Brief at 10 – 11, citing Exhibit 602 at 15.

§§ 54950 *et seq*.), which provides for open, transparent, participatory public decision-making similar to the Bagley-Keene Act (Government Code §§ 11120 *et seq*.), which governs the State of California decision-making bodies, such as this Commission. MPWMD recommends that records of the Regional Project must be retained and disclosed in accordance with the California Public Records Act (Government Code §§ 6250 *et seq*.) Finally, MPWMD recommends that the WPA be revised to require officials making substantive decisions related to the Regional Project to comply with the Fair Political Practices Act (Government Code §§ 81000 *et seq*.) to ensure disclosure of political contributions, as well as compliance with ethics requirements, and strict financial limitations required by the Fair Political Practices Act.

11.4.1. Discussion: Governance and Ratepayer Protection

As contemplated by the Settling Parties and set forth in Section 6 of the Water Purchase Agreement, the Advisory Committee would consist of a representative of Cal-Am, MCWD, and MCWRA, each of whom would have full decision-making authority. Consensus would be sought, but to the extent that differences could not be resolved, the parties on the Advisory Committee have the right to seek dispute resolution by a neutral third-party. In its reply brief, MCWD proposed, and Cal-Am and MCWRA supported in their reply briefs, the concept of a Municipal Advisor as an additional member of the Advisory Committee.

The purpose of the Advisory Committee is to ensure a coordinated approach to the construction and operation of the Regional Project. MCWD contends that there is no need to provide MPWMD a seat at this particular table; in fact, Cal-Am, MCWD, and MCWRA are adamant that allowing MPWMD to

have party status for purposes of the Advisory Committee and the Water Purchase Agreement would ensure that the Settlement Agreement unravels.

The parties to the Water Purchase Agreement explain that ratepayer interests are adequately represented without including MPWMD. They assert that Citizens for Public Water, recognized by DRA as a ratepayer representative, will help to ensure such protection, because Citizens for Public Water is now a signatory to the Settlement Agreement. In addition, they explain that MCWRA's Board of Supervisors represents citizens within Monterey County, including those within Cal-Am's Monterey service territory. The parties to the WPA also state that the Public Agencies' transparent and open review processes for budget and Regional Project implementation will ensure widespread ratepayer representation and protection.

The Settling Parties also assert that the Community Involvement Forum will provide ratepayers and other members of the community the opportunity to voice their concerns and to participate directly in the Regional Project discussion as the project evolves. As noted, they have now agreed to ensure that the Monterey Peninsula Cities have a role on the Advisory Committee, but decline to give this Municipal Advisor full party status for purposes of decision-making. The Settling Parties state that they wish to foster a cooperative, productive, and long-term association with the Monterey Peninsula Cities, and are "sensitive to the desire of Peninsula ratepayers to have an enhanced participatory role" in the Regional Project.[113]

---

[113] MCWD Reply Brief at 28.

In comments to the proposed revision to Section 6 of the Water Purchase Agreement, the Cities of Carmel-By-The-Sea, Pacific Grove, Sand City, Seaside, and Del Rey Oaks accept this modification and believe it is adequate to protect their interests. DRA, MPWMD, and the City of Monterey contend that the revision does not go far enough. These parties maintain that representation on the Advisory Committee is insufficient for true ratepayer protection; instead, the Municipal Advisor must be defined as a Party for purposes of seeking third-party dispute resolution. As the City of Monterey explains, unequal decision-making power does not provide the Peninsula ratepayers with the necessary transparency, public process, and enhanced participation in the Regional Project that is required.[114]

DRA and MPWMD concur, although both of these parties assert that MPWMD should be included as a voting member of the Advisory Committee. DRA explains that it is Section 6.6 of the Water Purchase Agreement that gives the Advisory Committee members their power; and under the proposed arrangement, the Municipal Advisor has no rights as a Party under the proposed amendments to Section 6.

[114] City of Monterey Comments to Amendment to Section 6 of the Water Purchase Agreement at 1.

While the Commission must consider the Settlement Agreement as a whole, we must also ensure that the various provisions of the Settlement and the Water Purchase Agreement are in the public interest. On balance, we find that adding the Municipal Advisor role to the Advisory Committee is reasonable. We disagree with DRA and MPWMD's arguments that MPWMD should be included as a voting member of the Advisory Committee. We find that by providing the Monterey Peninsula Cities with a meaningful advisory role on the Advisory Committee, together with the public processes to which the parties are required to utilize, provides adequate ratepayer protection. There is no need for duplicative roles and there are obviously some charged dynamics among the various water agencies on the Monterey Peninsula. Elected Peninsula City officials will coordinate on the appointment of the Municipal Advisor and with the overlap of governance between the MPWMD and the Monterey County Board of Supervisors, we are satisfied that MPWMD's concerns with integrated water management will be addressed.[115] We fully expect that MPWMD and Cal-Am will continue to coordinate to address water supply and conservation issues on the Monterey Peninsula, as they do now.

Finally, we do not find that the Advisory Committee must be subject to the requirements of the Brown Act and the California Public Records Act. As discussed above, both MCWD and MCWRA are subject to these statutes. The procedures that the Public Agencies must adhere to under the Brown Act and the

[115] MPWMD's Board of Directors includes a mayoral representative and a representative from the Monterey County Board of Supervisors, in addition to the directly-elected members of the Board.

Public Records Act provide sufficient information for the public and adequate avenues for public participation.

11.4.1.1. Status Reports

The Settling Parties have stated their willingness to provide regular, detailed status reports to the Commission. MCWD explains that, during the construction phase, § 4.5 of the Water Purchase Agreement provides for the Project Manager to submit monthly status reports to each party to the Water Purchase Agreement.[116] After construction, during the operational phase of this long-running project, Section 11.13 provides that Cal-Am, in consultation with the Public Agencies, prepare an annual report on the Regional Project that will be posted on Cal-Am's website. The Settling Parties agree that Cal-Am may use the monthly status reports to prepare detailed quarterly reports that will be provided to the Commission's Executive Director and the Director of DWA. DRA prefers that the monthly Project Manager reports be provided without additional, unnecessary reports being prepared. DRA is concerned that details regarding financing may be provided on a confidential basis.

We are pleased that the Settling Parties have agreed to provide detailed status reports to the Executive Director and the Director of DWA.[117] We require Cal-Am to also provide a copy of the report to the Director of DRA. This is a reasonable approach to ensuring that the Commission is fully informed as to the progress of the Regional Project. Quarterly reports should be sufficient. Cal-Am has also agreed to meet quarterly with DRA. This is also a very reasonable

---

[116] All status reports should be provided to all members of the Advisory Committee, including the Municipal Advisor.

[117] See, e.g., MCWD Opening Brief at 38.

approach and we direct Cal-Am to include DWA staff in these meetings. This approach is similar to the procurement review groups that are in place for energy utilities and provide an opportunity for informal discussion and resolution of concerns.[118]

Each status report should specifically delineate details as to the competitive procurement process, value engineering, contracting terms, project management, the constructability review, and the milestones achieved for each aspect of the project. DWA staff should be included in the inspection and audit protocols set forth in Section 4.11, as appears to be contemplated by the WPA. Additionally, we shall require Cal-Am to submit regular filings as to the adequacy of the water received and any issues with respect to adequate ratepayer representation.

Transparency is essential, although there may be particular reasons to submit certain components related to the status reports on a confidential basis. It is premature to address confidentiality concerns at this time. We prefer to wait until the reports have been submitted and staff can review and assess the adequacy of these reports at that time. The quarterly meetings with Cal-Am, DRA, and DWA will provide a viable forum for resolving such concerns.

In sum, we are satisfied with the status report agreements, and see no reason to modify the Settlement Agreement or WPA, since Settling Parties have agreed to comply with this approach.

---

[118] D.02-08-071, Finding of Fact 18 at 38; D.07-12-052 at 119 et seq.

11.5. Water Supply, Water Delivery, Brackish Source Water Supply and Management

A major component of the Settlement Agreement and the Water Purchase Agreement is the provision that the Settling Parties will maximize the intake of seawater on a cost-effective basis in a way that ensures compliance with the requirements of the Agency Act. There is no source water on the Monterey Peninsula. All parties seem to agree that maximizing the use of seawater is the preferred approach, but until MCWRA constructs both a vertical and slant test well, the Settling Parties contend that we cannot require that slant wells be incorporated into the design of the Regional Project.

In other words, because a relatively small amount of source water is expected to be pumped from the Salinas Valley Groundwater Basin, that water cannot be exported from the Salinas Valley. Essentially, maximizing the seawater content assists as a proxy for determining whether source water is seawater or groundwater. This approach assists the Settling Parties in preventing exportation of Salinas Basin Groundwater.[119] As MCWRA explains, it is important to consider the composition of the brackish water: "Because of the existing geology and hydrology, both components of the brine, groundwater and ocean water, are essentially returned to their natural receiving waters. Therefore, the only water that could be considered as exported out of the groundwater basin is a possible fraction of the brackish source water from the Salinas Basin in the treated water delivered as drinking water to CAW, as water to MCWD is in

[119] Exhibit 500 at 13.

effect a return to the Salinas Basin. This fraction is lower as the water gets more salty."[120]

At this point, because of seawater intrusion, according to the FEIR, we can assume that the salinity of the seawater and the salinity of the brackish groundwater are approximately equal.[121] The FEIR finds that, as designed and modeled, assuming vertical wells are the source water wells, and assuming that the wells are pumped continuously in the 180-Foot Aquifer, an "extraction barrier" would be created that would prevent future seawater intrusion.[122] It is important to keep this concept in mind as we discuss the concerns regarding water supply and water allocation below.

Salinity is determined by a calculation of the amount of Total Dissolved Solids (TDS) and chloride levels in the source water. The water to be desalinated is water which has a TDS concentration high enough to make it unsuitable for human consumption or agricultural use unless it is treated. This is the brackish source water, which will be produced by new wells to be owned by MCWRA.[123]

---

[120] MCWRA Opening Brief at 39.

[121] FEIR, Appendix Q at Q-76.

[122] FEIR, Appendix Q at Q-7.

[123] Exhibit 500 at 14; MCWRA Reply Brief at 20.

As set forth previously, Cal-Am requires 8800 afy of desalinated water in a normal year and 10,900 afy in a critically-dry year to replace the water supplies from the Carmel River and the Seaside Basin. The goal of the Regional Project is to satisfy this requirement. Accordingly, MCWRA is charged with taking the necessary steps to both comply with the Agency Act and to deliver brackish source water to MCWD sufficient to produce up to 10 mgd of desalinated water.

As set forth in Exhibit 306, the 10-mgd plant will be operated to produce 10,500 afy of desalinated water in a normal precipitation year, which would then provide 8,800 afy to Cal-Am and up to 1,700 afy to MCWD. MCWD requires 2,700 afy from the Regional Project. The permanent allocation of 1700 afy to MCWD from the desalination plant would be supplemented with the 1,000 afy of recycled water provided to MCWD by the RUWAP project. According to MCWD's consultant, the 10 mgd capacity could still provide Cal-Am's peak needs and meet the simultaneous MCWD demand of 1,700 afy in a drought year, because MCWD could rely on its groundwater well pumping capacity to meet its peak demands during the critically dry portion of the year when Cal-Am requires 10,900 afy. The desalination plant could produce up to 11,200 afy, assuming operation at full capacity.[124] The more product water that is produced and delivered to Cal-Am, the lower the unit costs of that water.

In order to ensure that groundwater is not exported from the Salinas Valley Groundwater Basin, MCWD, which is located within the Salinas Valley Groundwater Basin, has agreed to take an annual allocation of desalinated water for distribution within its service area (again, within the

[124] Exhibit 306 at 10-11, 21.

Salinas Valley Groundwater Basin). As long as this restriction is complied with, the remaining amounts of product water can be conveyed to Cal-Am for distribution to its customers. We discuss the derivation of these calculations below.

The calculations of the amounts of product water that are to be delivered to Cal-Am and to MCWD are based on groundwater and hydrologic modeling, and parties recognize that some variance will occur. Based on this modeling, Settling Parties have determined that the MCWD Agreed Allocation will be calculated by multiplying the amount of desalinated water produced by the desalination plant during a calendar year by the average percentage of the amount of Salinas Basin Water included in the Brackish Source Water. Each calendar year, MCWD will receive its annual allocation of the desalinated water – either the agreed allocation or the permanently allocated water, whichever is greater.

For purposes of determining the MCWD agreed allocation, the average percentage of Salinas Basin water in the source water will be deemed not to exceed 15% during the first five years of operation of the Regional Project. Thus, based on the average production from the desalination plant of 10,500 afy, MCWD is then deemed to receive up to 1,700 afy of product water (defined as the MCWD Agreed Allocation). This approach allows Cal-Am to receive an average of 8,800 afy of water from the desalination plant. The Settling Parties also recognize that Cal-Am requires additional water during peak periods and in critically dry years. After the first five years of operation, the calculation of annual allocations and agreed allocations will be derived according to the formulas in Exhibit E of the Water Purchase Agreement.

Permanently allocated product water refers to the quantity of water needed to satisfy MCWD's customers' demand that cannot be satisfied by MCWD's potable groundwater limits. This term refers to the limits for the withdrawal of water from the Salinas Basin imposed on MCWD for the development of the former Fort Ord. As provided for in Section 9.4(d) of the WPA, MCWD is required to notify Cal-Am when it requires permanently allocated product water:

> Unless consented to in writing by CAW, in no event shall MCWD seek or cause to have more than 1,700 AFY of Product Water (at the MCWD Meter) deemed to be MCWD Permanently Allocated Product Water or apply for or seek to obtain or establish any right, title, permit or permission to have more than an aggregate of 1,700 AFY of Product Water (at the MCWD Meter) deemed to be MCWD Permanently Allocated Product Water.[125]

Section 8.2(a) of the Water Purchase Agreement requires that at least one vertical test well and one slant well be drilled and pumped and the water analyzed to obtain more precise data regarding the operation of the wells and the salinity of the water extracted from the wells. Compliance with the Agency Act is within MCWRA's jurisdiction and MCWRA would determine the particular types of wells to drill based on analysis of the data and after consultation with MCWD and Cal-Am. MCWRA would also determine whether the MCWD Agreed Allocation (i.e., up to 1,700 afy based on the assumption of an average of 15% groundwater in the brackish source water) can be delivered and still meet the requirements of the Agency Act. If test well development reveals that

[125] Exhibit 301 at 49.

Cal-Am will not be able to receive its full allocation of desalinated water, MCWRA must prepare a written report; parties are to meet and confer to develop a plan of action; and Cal-Am may seek additional Commission approval, to the extent that expenditure of additional funds are required. "Upon availability of test well results, if determined to be prudent by the Parties, a Brackish Source Water contingency plan will be prepared by a mutually acceptable engineer."[126]

As set forth in the WPA, the Advisory Committee is to meet at least every quarter to review the prior quarter's quantity of pumped brackish source water, the average TDS and chloride concentrations, and the elevation of the Salinas Basin, and to discuss and recommend the current quarter's pumping and delivery of source water to ensure that both Cal-Am and MCWD receive the proper allocations of desalinated water. The Advisory Committee will also meet quarterly to plan deliveries of product water that ensures that both the Cal-Am and MCWD allocations are fully met, recognizing Cal-Am's need for the full allocation of product water during its peak demand period. The Settling Parties have recognized the need for accurate measurement of the volume of brackish source water deliveries from the wells to the desalination plant and of product water deliveries from the desalination plant to the MCWD meter and the Cal-Am meter, and have spelled out details in the WPA to ensure precise measurement of these quantities.[127]

We have provided a detailed review of the WPA's provisions regarding source water supply and planned deliveries, because DRA and MPWMD have

---

[126] Exhibit 301, §8.2(a) at 45.

voiced serious concerns as to whether the salinity of the source water will be maximized using vertical wells. Both recommend the use of slant wells to ensure that the salinity of the source water is truly maximized and that Cal-Am actually receives the allocated water that it is paying for.

Based on BOR's report and an analysis of the groundwater modeling, DRA recommends the use of slant wells rather than vertical wells to provide the source water. BOR concludes that: "By orienting the well so that it protrudes toward or under the sea, the ratio of seawater to groundwater extracted by a slant well should be substantially higher than that of a vertical well. This means that for a desalting plant of a given size the volume of groundwater extracted will be considerably lower."[128]

The BOR Report recognizes that there is not much practical experience with slant wells and states that additional information is required to ensure that vertical wells would indeed produce an average of 85% seawater and 15% groundwater. BOR recommends that a test well should be drilled and operated to determine whether slant well or vertical well technology should be utilized and that the test wells should be operated long enough for the water to come to a steady state, by tracking concentrations of various components that appear in significant concentrations in seawater.

DRA contends that the Commission must require the Settling Parties to use slant wells as intake facilities, unless the slant wells are found to be infeasible in the testing stage. DRA argues that requiring the use of slant wells would reduce litigation, maximize the use of seawater as opposed to groundwater, and

---

[127] Exhibit 301, §10 at 52-53.

reduce the subsidy of MCWD by Cal-Am ratepayers. As DRA explains it, the MCWD Agreed Allocation is equal to the average percentage of groundwater in the source water mix. For example, if the average percentage of groundwater (based on salinity) is 16.2%, then MCWD must take the Agreed Allocation, which in this case is also equal to the Permanent Allocation. Here, 16.2% of 10,500 afy (i.e., the total afy to be produced by the desalination plant) is equal to 1,700 afy. This is the amount that MCWD will take so that the groundwater allocation remains in the Salinas Valley basin. DRA and MPWMD are not as concerned if the average percentage of groundwater is 16.2% or less, because then Cal-Am will receive its full allocation of 8,800 afy.

The real concern occurs when the calculation of the groundwater percentage in the source water is greater than 16.2%, based on salinity. In this case, DRA and MPWMD contend that Cal-Am will not receive its full allocation of water and Cal-Am ratepayers will be shortchanged. For example, if the average percentage of groundwater is 6%, DRA explains that the MCWD Agreed Allocation would be 562 afy,[129] and 1,138 less acre-feet per year would be required to remain in the Salinas Valley basin.

In DRA and MPWMD's views, the more desalinated water that must be left in the Salinas Valley Groundwater Basin (because of the requirements of the Agency Act), then the more Cal-Am ratepayers must pay for the product water. DRA and MPWMD therefore conclude that requiring the use of slant wells would reduce the amount of desalinated water that must be left in the

---

[128] Exhibit 204 at 6.

[129] DRA bases this analysis on Exhibit 301, Exhibit E.

Salinas Valley by 1,138 afy at a savings of $647,000 per year.[130] If feasible, therefore, DRA states that slant wells should be used because this technology will minimize the potential that Cal-Am will not receive the water its customers are paying for, will avoid costs associated with vertical wells required to ensure that the groundwater percentage is below 16.2%, and will avoid more costly energy costs associated with vertical well operation. Based on Exhibit 108, DRA assumes that the energy cost savings are $382,545 per year. Combined with the savings derived from reducing the amount of groundwater that must be left in the basin, DRA argues that an annual savings of $1.1 million should offset the additional incremental costs of installing slant wells (estimated at $8.3 million for four additional slant wells).

DRA and MPWMD also maintain that limiting the amount of groundwater that must remain in the basin would reduce the chance of potential project failure and the risk of litigation. To the extent that the average percentage of groundwater exceeds 16.2%, DRA argues that Cal-Am may not be able to receive the full 8,800 afy needed to serve its customers. For example, if the source water consists of 20% groundwater (as determined by salinity), then 20% of the product water must remain in the basin: for purposes of this calculation, 20% of 10,500 = 2,100 and Cal-Am could receive only 8,400 afy.

DRA and MPWMD also contend that while there is an assumption that the source water will consist of 15% groundwater during the first five years of the

---

[130] DRA Opening Brief at 29, citing Exhibit 320 which calculates the total cost for energy, chemicals and brine disposal divided by plant production of 10,500 afy to derive $740 per acre-foot estimate. DRA uses the following formula to calculate the annual savings: (1,138 afy * $740/acre-foot incremental cost) – 1,138 * $148/acre-foot to be paid by MCWD) = $647,000.

project and there is an additional provision to use a rolling five-year average in determining the percentage of groundwater, these assumptions – while smoothing out the variability concerns – could lead to litigation by entities disputing the compliance of such provisions with the Agency Act. MPWMD questions the very construct of the Settling Parties' characterization of the composition of the source water and fears that all source water could be construed to consist entirely of brackish groundwater, which would then lead to litigation risk and untenable delay.

11.5.1. Discussion: Salinity, Slant Wells, and Vertical Wells

We will not require the modification of the Settlement Agreement or the WPA to require the use of slant wells, because we find that the test well approach that is carefully outlined in the WPA is adequate. We are not convinced that the salinity issue is as dire as the opposing parties portray. As the FEIR explains, groundwater pumping for municipal and irrigation supply has led to a drop in groundwater levels and concomitant seawater intrusion. This is not a new issue. As the FEIR notes, seawater has been migrating gradually into the Salinas Valley Groundwater Basin since the 1940s and was first documented by the Department of Water Resources in 1946.[131] Here, all parties have elected to use salinity as a proxy for determining the amount of source water that is seawater and the amount of water that is groundwater. We cannot, however,

[131] FEIR at 13.6-2 and 3.

view the salinity calculation in isolation.[132] We must also focus on the volume of groundwater in the basin.

As explained in the FEIR, pumping the wells (whether vertical or slant wells) will not only draw seawater towards the coast, but the saline-intruded groundwater will also be drawn towards the coast, which in essence reverses the seawater intrusion dynamic and reduces the salinity of the groundwater portion of the intake supply.[133] The portion of the intake supply that is of groundwater origin will remain the same, but the water will be less saline. In addition, the existing Castroville Seawater Intrusion Project (CSIP) reduces demand on groundwater and helps to stabilize groundwater pumping. As we have discussed, the CSIP distributes recycled water through the Salinas Valley Recycling Project to agricultural users in the northern Salinas Valley Groundwater Basin and this helps to alleviate groundwater extraction in those areas. The Salinas Valley Water Project (SVWP), which consists of modifying the Nacimiento Dam spillway and reoperating the storage and release schedules of the Nacimiento and San Antonio reservoirs, and the construction and operation of the Salinas River Diversion Facility (SRDF) will direct Salinas River water for delivery to CSIP customers to replace the current use of groundwater that is delivered with the recycled water.[134] The SRDF became operational in 2010. All

---

[132] Exhibit 500 at 7 explains some of the projects that have assisted MCWRA in slowing seawater intrusion in the Salinas Valley Ground Water Basin.

[133] See Chapter 13.6 of FEIR.

[134] FEIR at 5-2.

of these projects and redistribution of water resources help to provide a form of "in-lieu" groundwater recharge, according to the FEIR analysis.[135]

We are satisfied, therefore, that the volume of water retained in the Salinas Valley Groundwater Basin will be adequate to ensure that Cal-Am receives its full water allocation, even if vertical wells are ultimately determined to be the best source water technology. We see no reason to modify the language in the WPA that describes the test well approach and we see no reason to require the use of slant wells – an admittedly more expensive and untested technology – at this time. In sum, we agree with the Settling Parties: it is premature to determine the configuration of the source wells. We are satisfied that the WPA provides that the test well approach will "supplement existing analyses to provide additional information to allow for a sound basis for selection of the intake well configuration."[136]

We are also satisfied that Settling Parties will ensure that a Water Contingency Plan is developed, to the extent that both slant wells and vertical wells prove to be infeasible, an event that we do not deem to be likely. Because of the Municipal Advisor, the community outreach that is built into the Settlement Agreement and the WPA, the Settling Parties are –as they should be – fully accountable to develop the source wells in the most cost-effective manner. If MCWRA determines that development of the source wells is not feasible for some reason, we will be duly informed. Based on the requirements of the Cease and Desist Order, we have no doubt that Cal-Am will petition for additional relief, if the Regional Project appears to be infeasible.

---

[135] FEIR, Chapter 13.6.

Given the importance of the water allocation issue, however, it is reasonable to require Cal-Am to submit a report after the first five-year period that provides updated information on the water supply obligations and deliveries addressed in Section 9 of the Water Purchase Agreement. Cal-Am must submit this report to DRA, DWA, and serve all parties in this proceeding.

11.6. Operation and Maintenance Costs

DRA recommends that the Commission consider O&M costs in a separate phase of this proceeding. As DRA explains, the WPA is structured to allow the recovery of O&M costs through the uncapped price of product water. Until MCWD takes its permanent allocation, Cal-Am ratepayers would be responsible for all of these costs. DRA maintains that a fair, equitable, and accountable O&M contract and contractor selection process must be established in order to ensure that cost controls are in place and that ratepayers are protected. DRA contends that because the Settlement Agreement and Water Purchase Agreement do not provide any information related to O&M cost controls, risk mitigation, contractor selection, and performance standards, there is no protection for Cal-Am ratepayers.

The parties estimate total annual O&M costs at $12.9 million, while DRA estimates that the annual costs will be $14.270 million (based on a start date of 2015). These annual costs are significant and because the WPA is anticipated to last for 94 years, developing consumer protections and cost savings for the O&M plant is particularly important, in DRA's view. DRA recommends that the Commission convene a workshop to develop the information to be considered in the O&M phase of the proceeding.

---

[136] MCWD Opening Brief at 75, citing Exhibit 319 at 32.

11.6.1. Discussion: O&M Costs

While we agree with DRA that the estimated annual O&M costs are significant, we do not agree with their assertion that there is no protection for Cal-Am ratepayers. As previously discussed, the procedural and other legal requirements imposed on MWMD and MCWRA, along with the terms and conditions of the Settlement Agreement and Water Purchase Agreement, require that annual O&M costs approved by their respective Boards will be just and reasonable.

Section 6.5(h) of the Water Purchase Agreement directs the Settling Parties to review and consent to the reasonableness and prudency of the O&M Costs. As part of our continuing jurisdiction over Cal-Am to ensure that rates are just and reasonable, Cal-Am cannot consent to the O&M costs without first seeking our authorization. Thus, Cal-Am is directed to file a Tier 2 advice letter with the Commission seeking authorization to consent to the O&M costs before it may give its consent or approval under the Water Purchase Agreement. We do not consider this requirement, which is part of our ongoing regulation of Cal-Am, to be a material change to the Water Purchase Agreement. Indeed, our review is similar to the review that will be performed by the Public Agencies' Boards. Rate recovery for any O&M expenditures will not be authorized absent prior Commission approval.

12. Technical issues

According to the BOR's report, the capital costs of the desalination project will be reduced by requiring competitive bidding and eliminating a second pass in the reverse osmosis technology. BOR also recommends that a year-long pilot project be implemented, in order to address technical concerns with desalting the water, which may impact the performance of the reverse osmosis membranes.

BOR believes this desalting pilot test is worth the additional time and expense required. DRA agrees with this recommendation and contends that such an approach will decrease implementation costs and reduce financing costs.

Section 4.3(b) of the WPA provides for a competitive procurement process to select a qualified contractor or contractors to construct the Regional facilities. We are satisfied with these provisions and find that no modification to the WPA is required.

12.1. Partial Second Pass and Boron

BOR maintains that a second pass reverse osmosis is not required to meet either the federal Environmental Protection Agency standard or the current California Department of Public Health notification level for boron of 1 milligram per Liter (mg/L). While DRA supports designing the Regional Project to meet the current requirements, it objects to requiring Cal-Am ratepayers to pay for second pass treatment to "meet the needs of MCWD customers and the agricultural community."[137] DRA contends that the cost of the additional reverse osmosis equipment required for the second pass is $10.3 million, which would be escalated to $18.7 million, assuming a 30% implementation adder added to the 25% contingency allowance, and compounded by the proposed 17.5% allowance for the high end of design of the plant. DRA believes this decision is driven by agricultural interests seeking to reduce the level of boron in the recycled water used for irrigation. Again, DRA argues that a pilot test program would allow for an exploration of the impact of boron and would be much less costly than $18.7 million.

---

[137] DRA at 20.

12.1.1. Discussion: Partial Second Pass and Boron

While DRA urges that we modify the Settlement Agreement to eliminate the requirement for a partial second pass, the Settling Parties maintain that the partial second pass required by the Settlement Agreement and the WPA "provides additional reliability for reducing boron to levels lower than the State notification level of 1 mg/L, prevents horticultural toxicity when the desalinated water is used to irrigate the home landscaping of the CAW ratepayers, and helps protect the approximate $4 billion per year agricultural industry of Monterey County when the water is returned and used in the form of recycled water for agricultural irrigation."[138] Settling Parties strongly contend that eliminating the second pass would save only 3% of the total project cost and would increase risks associated with desalinated water production. Cal-Am is also concerned that using a single pass for the Reverse Osmosis process would trigger a requirement to notify its customers because of California Department of Public Health guidelines and requirements.[139] Although the concerns appears to be centered on public perception rather than any actual health concerns, Cal-Am is understandably reluctant to commit its ratepayers to paying for a desalination facility that could lead to concerns about the quality and safety of the desalinated water.

Public Trust Alliance asserts particular concerns about eliminating the second pass requirement in order to save money on this project. Public Trust Alliance contends that the benefits of the second pass technology clearly

---

[138] Exhibit 319 at 30.

[139] Cal-Am Opening Brief at 34-35.

outweigh the increased compliance costs and argues that many of the benefits are weighted toward future considerations. Public Trust Alliance explains that the harmful effects of boron exposure fall most heavily on the young, that it is reasonable to ensure that up-to-date technology be used to protect future generations, and that it is not reasonable to assume that the "regulatory lag" in updated requirements by the Federal Environmental Protection Agency and the California Department of Public Health should be the level that protects the public trust. In essence, Public Trust Alliance asserts that "[s]econd pass technology is no longer a 'gold-plated' standard; it is relatively common in new projects."[140]

We agree with the Settling Parties. We are convinced that protecting the public resources and ensuring that a higher level of technology is in place to address boron and other potential contaminants comports with the public interest. Therefore, we make no modifications to the use of second pass technology in the Settlement Agreement and the WPA. We believe that the Public Trust Alliance has expressed it well:

> The Public Trust Alliance recommends that second pass technology be permitted subject to the conditions specified in the Water Purchase Agreement. These conditions effectively prevent an arbitrary or wasteful expenditure. We recognize that the selection of appropriate technology will be based on the advisory committee's evaluation of the relative merit of technical solutions presented by offerors in a competitive procurement. We are optimistic that the committee's decision will reflect an appropriate valuing of environmental and public trust concerns. Acquisition of effective technology should not be hampered by a view that the minimum

[140] Public Trust Alliance Opening Brief at 8.

statutory requirements represent a ceiling on what may be purchased.[141]

As we have explained previously, the WPA provides for a 94-year agreement. The plant and its components will obviously require replacement prior to the expiration of the WPA. However, because the desalination plant is a major addition to the Monterey Peninsula's permanent water infrastructure, it is reasonable to allow for reverse osmosis technology that will allow for a margin of safety that exceeds the current minimum legal requirements.

12.1.2. Pilot Test

DRA supports BOR's recommended year-long pilot test and asserts that this approach is necessary to reduce risk, keep the project on a critical path, and still meet the Cease and Desist Order timeframe. Assuming that the CPCN decision is issued by year-end, DRA maintains that the anticipated 4.5 year timeline would still result in project completion by 2015, i.e., approximately a year ahead of the Cease and Desist Order's 2016 deadline. In fact, DRA maintains that such an approach is crucial to avoiding design error, equipment failure, or membrane scale formation that could arise and delay the construction and operation of the Regional Project. Moreover, BOR estimates that a year-long pilot program would cost $1.5 million if the pilot unit from the Moss Landing proposed project is refurbished and re-used. DRA asserts that this unit should indeed be repurposed for Cal-Am ratepayers' benefit, since they have paid for the Moss Landing pilot project as part of Special Request Surcharge 1.

---

[141] Public Trust Alliance Opening Brief, Tables and Recommendations at page x.

12.1.2.1. Discussion: Pilot Test

We agree with Settling Parties that a year-long pilot test is not necessary. The technical experts to MCWD and MCWRA are convinced that additional pilot testing would not provide additional information that cannot be ascertained from the test wells, and would add delay and expense to the process.[142] DRA and the BOR argue that the information gleaned from the pilot testing phase could well lead to reduced implementation costs. The Settling Parties argue that such an approach would add approximately $9 million to the capital costs (based on the $1.5 million cost estimated by BOR and $8 million estimated for the year's delay in the project).[143]

A pilot test was previously conducted for the Moss Landing project, as all parties have acknowledged,[144] and we see no reason to delay this project any further. We agree with MCWRA's conclusion that because a pilot test would certainly add to costs and it is not clear whether such an approach will save implementation costs, "without very strong evidence that a pilot is necessary, a pilot test should not be required."[145] Given the sensitivity analysis in DRA's testimony, it is clear that a delay in the construction period will add to the costs of the project and we are not convinced that implementation costs will be correspondingly reduced. As the Regional Project evolves and solidifies in design structure, the Settling Parties will be providing reports to and meeting regularly with DRA and DWA. We are confident that these status reports and

---

[142] Id. at 67.

[143] Id.

[144] See, e.g., RT at PHC-3 at 47.

[145] MCWRA Reply Brief at 18.

meet-and-confer sessions will provide sufficient information to address concerns going forward.

While we have not required modifications to the Settlement Agreement based on the BOR report, we observe that the BOR has significant experience with desalination projects and it is reasonable that the Settling Parties consider the suggestions they have made for careful, cost-effective approaches to the project.

12.1.3. Discussion: Sale of Excess Water

DRA also recommends that § 9.5 of the WPA be modified to ensure that, to the extent Cal-Am elects to receive less than its full allocation of 8,800 afy, Cal-Am should own the water and have the right to sell that water for not less than the incremental cost of water. Of course, if MCWD wishes to buy the excess water, DRA does not object to Cal-Am selling any excess water to MCWD, to the extent that there is not a buyer willing to pay more than MCWD is willing to pay.

The Settling Parties contend that DRA's concerns regarding the sale of excess water are misplaced. "To be clear, if at any time CAW elects not to take its full 8,800 afy allocation of Product Water from the Regional Desalination Project, whether due to 'increased conservation or acquisition of additional water supply' (cite omitted) or for any other reason, and MCWD then were to elect to take the excess water, MCWD would be paying full price for that excess water."[146] However, MCWD also explains that if Cal-Am elected not to take its full allocation, MCWD would have the right of first refusal of that water, before parties explore the sale of excess water to third parties. Based on the fact that MCWD is unlikely to require even its Permanent Allocation of water in the

foreseeable future, we agree that it is unlikely that this clause would be exercised. We do not find that any modifications to the Settlement Agreement and the WPA are necessary to address sale of excess water. Nevertheless, we do want to be clear that any sale of excess water should inure to the benefit of Cal-Am ratepayers. Cal-Am ratepayers are providing the vast majority of the funding for this Regional Project and should correspondingly benefit from any sales of the product water.

13. Cal-Am Facilities

The Settlement Agreement provides a description of the Cal-Am facilities, the construction schedule for those facilities, and the estimated costs of the facilities. The Cal-Am facilities consist of three large diameter conveyance pipelines (the Transfer Pipeline, the Seaside Pipeline, and the Monterey Pipeline, which also includes the Valley Greens Pump Station), two distribution storage reservoirs (the Terminal Reservoirs), and aquifer storage and recovery facilities. The hoped-for construction schedule envisions land and right-of-way acquisition, permitting, and design beginning in the fourth quarter of 2010 and completed by mid-2012. Actual construction is anticipated to begin in late 2011 and would be completed by summer of 2014.

The Settling Parties have developed three scenarios for the Cal-Am facilities: the low scenario estimates costs at $82.6 million; the median scenario estimates costs at $95 million; and the high scenario estimates costs at $118.75 million. The low scenario is 15% below the median scenario and the high scenario is estimated at 25% above the median scenario. For purposes of setting

---

[146] MCWD Reply Brief at 25.

a capital cost cap, the Settling Parties have agreed to use the mid-point of the median and high scenarios, i.e., $106,875,000.[147]

The Settling Parties have agreed to establish cost containment and project management measures, including establishing measurable goals and objectives, setting design criteria to meet those goals and objectives, freezing the project size and configuration as early as possible, utilizing a transparent system of review, and utilizing value engineering in order to reduce costs.

The proposed Cal-Am facilities include the following:

Facilities	Low Scenario	Median Scenario	High Scenario
Transfer Pipeline	$ 9,565,000	$11,000,000	$13,750,000
Seaside Pipeline	$13,044,000	$15,000,000	$18,750,000
Monterey Pipeline (includes Valley Greens Pump Station)	$21,740,000	$25,000,000	$31,250,000
Terminal Reservoirs	$14,783,000	$17,000,000	$21,250,000
Aquifer Storage and Recovery Facilities	$23,478,000	$27,000,000	$33,750,000
Total	**$82,610,000**	**$95,000,000**	**$118,750,000**

DRA recommends that the Commission adopt a capital cost cap for the Cal-Am only facilities based on the most probable cost estimate presented in the Settlement Agreement.[148] DRA recommends three adjustments to Cal-Am's most

[147] Exhibit 363, § 8 at 10; Attachments 3 and 4 to the Settlement Agreement filed on April 7, 2010.

[148] As defined, the most probable capital cost with contingency includes base construction cost + post-effective date implementation costs + right-of-way land acquisition and easement costs + costs of environmental mitigation measures + project contingency of 25%. (DRA Opening Brief at 40.)

probable cost estimate of $95 million: reduce the ASR project cost estimate by $3.25 million; reduce the Terminal Reservoir Project cost by $4 million; and eliminate the 25% contingency on right-of-way easement and land acquisition costs thus reducing costs by $850,000.

DRA recommends that the actual unit costs incurred by MPWMD in Phase 1 of the ASR project are a better estimate of Cal-Am's Phase 2 future costs than the conceptual cost estimates presented in this record. DRA escalated these costs to the mid-point of 2012, when the construction is anticipated to begin. DRA argues that this approach provides the proper incentive to Cal-Am to pursue cost reductions in this project.

DRA also contends that constructing the Terminal Reservoir above ground will reduce the base construction costs by $2.2 million and would result in a final adjustment of $4 million, after adjusting implementation costs, escalation, contingency, and the range of accuracy assessments. DRA recognizes that the City of Seaside prefers an underground reservoir, but does not believe that Cal-Am ratepayers should be responsible for the additional costs incurred by this approach.

Finally, DRA asserts that the 25% contingency adder that Cal-Am included on certain right-of-way easement and land acquisition adjustments should be removed. DRA contends that real estate transactions are not subject to such contingencies, because such transactions are based on comparable sales and transactions.

DRA also recommends that the project cost contingency percentage be updated as the project evolves and component costs become more certain. DRA does not disagree with the current contingency estimate (based on a Class 4 estimate according to the Association for the Advancement of Cost Engineering),

but recommends that this estimate be refined to ensure that costs are appropriately constrained. DRA also asks the Commission to ensure that Cal-Am update both DRA and DWA on the evolving design and cost estimate of the Cal-Am only facilities. DRA maintains that the Settlement Agreement should be modified to include this requirement, which will help ensure that Cal-Am "identifies, explains, and justifies the project costs, and will assist in future reviews for prudency."[149]

13.1. Discussion: Cal-Am Only Facilities

The Settling Parties assert that the capital cost cap proposed for the Cal-Am-owned facilities should be set at $106.875 million, an amount midway between the most probable cost estimate and the high-cost scenario. DRA recommends that the Commission adopt a capital cost cap based on the most probable cost estimate. Based on the Settling Parties' most probable cost estimate of $95 million, DRA proposes potential cost reductions and ultimately recommends a cost cap of $86.6 million, a reduction of $8.4 million.

As both Cal-Am and DRA agree, the estimated capital costs are just that – estimates. To the extent that actual costs are lower than the cost cap adopted by the Commission, the lower amount will be reflected in rate base. Similarly, if Cal-Am's actual costs are greater than the proposed cost cap, and the Commission approves these higher amounts, these amounts will be recorded in rate base. At this point, it is reasonable to adopt the cost estimate for the Cal-Am facilities proposed by Settling Parties – $106.875 million. This is an amount midway between the most probable cost estimate and the high-cost scenario and

[149] DRA Opening Brief at 47.

it is reasonable to adopt a capital cost ceiling now to provide certainty for ratepayers and investors.

We do not agree that DRA's proposed reductions of $3.25 million to the ASR facilities should be based on MPWMD's actual costs to establish the Phase 1 ASR facilities. As Cal-Am points out, there are differences in the depths of the proposed ASR wells and the design criteria are significantly different than for the existing ASR wells.[150] In fact, the BOR Report states:

> There is still much uncertainty regarding the ASR system which won't be resolved until permits are issued.
>
> Cal Am Data Response #50 provides justification for increasing the ASR well estimate $3,000,000 from the 2005 estimate. This cost increase appears reasonable considering design changes and additional technical data that has become available since the 2005 estimate was prepared. Currently, Cal Am is in the process of obtaining the necessary permits in order to access the proposed ASR sites. Once Cal-Am obtains site access and drills the proposed monitoring well, it will be possible to further refine the ASR cost estimates.[151]

Similarly, we do not agree that the cost of the Terminal Reservoirs should be reduced by $4 million. Again, we wish to ensure that the Regional Project can move forward in as timely a manner as possible. While DRA contends that Cal-Am ratepayers should not pay for below ground facilities, Cal-Am contends that it is not likely that the City of Seaside would permit an above-ground reservoir. It is certainly not clear whether, and if so, what additional mitigation

---

[150] Cal-Am Reply Brief at 24, citing Exhibit 105 at 16-17.

[151] Exhibit 204 at 20.

costs would be required to offset the above-ground approach.[152] Attachment 3 to the Settlement Agreement includes a discussion of the twin, 3 million gallon concrete tanks that will be constructed in the City of Seaside and notes that "all tank options (i.e., at grade, partially-buried, or completely buried) will be investigated for technical feasibility, practicality, economic viability and appearance."[153]

We must consider overall feasibility of the project, including the Cal-Am facilities, in our assessment of the Regional Project. A project of this magnitude will require substantial time for permitting and review by local authorities. Given the exigencies of the Cease and Desist Order, it is not reasonable to place additional permitting constraints on the Cal-Am facilities. We agree with the observations of the Monterey Peninsula Cities:

> If the Peninsula were not in jeopardy of draconian water reductions imposed by the CDO, some elements of the phased and conditional approval advocated by DRA might be warranted. However the Peninsula cannot afford a significant Project delay given the time constraints arising from the CDO. Financing must be procured and construction must commence as soon as possible.[154]

The Settling Parties appear to agree with DRA that contingencies should be adjusted as the Project becomes more certain. Cal-Am testifies that this approach is standard practice and explains that this practice is provided for in § 6.4(j) of the WPA. According to Cal-Am, the updated construction budget for

---

[152] Exhibit 105 at 10.

[153] Motion to Approve Settlement Agreement, filed April 7, 2010, Attachment 3 at 6.

[154] Opening Brief of Cities of Seaside, Sand City, Monterey, Carmel-By-The-Sea, and Pacific Grove at 3.

the Regional Project would include revised and updated contingency factors and would be included in the status update reports that the Settling Parties have agreed to provide.[155] We concur that this is a reasonable approach, and one that does not require modification of the Settlement Agreement.

DRA also suggests that the 25% contingency factor included for land acquisition and right-of-way easements be eliminated, because a contingency factor is not generally applied to such transactions. Here, too, we find that the Settlement Agreement and Water Purchase Agreement provides for this adjustment. No modification is required. As land is acquired and the Project is developed, such transactions will inform the cost estimates and the contingency factors. The contingency factor for these costs should be updated and included in the status reports.

On balance, we find that it is reasonable to approve a capital cost cap of $106.875 million for the Cal-Am-owned facilities. As we did with the Regional facilities, Cal-Am may only seek recovery from ratepayers of costs exceeding $106.875 million under extraordinary circumstances.

13.2. Proposed Ratemaking

13.2.1. Used and Useful Determination

The Settling Parties propose that, for ratemaking purposes, certain of the Cal-Am facilities should be treated as used and useful as soon as they are constructed, even if the full Regional Project is delayed for some reason. Cal-Am explains that this approach is valid because certain facilities were designed to resolve two operational limitations of Cal-Am's existing distribution system,

[155] Cal-Am Reply Brief at 26-27.

i.e., the ability to maintain adequate water levels in the Forest Lake tanks during maximum day demand conditions (usually several hot summer days in a row) and the inability to transport water from the Seaside area to the rest of the Monterey Peninsula. This approach would not be applied to the Transfer Pipeline, which will be designed to transport water from the Cal-Am meter point to its service territory.[156]

13.2.2. Revenue Requirement Components

As set forth in § 9 of the Settlement Agreement, other than the Transfer Pipeline discussed above, Cal-Am will record the total cost of the Cal-Am facilities, subject to the capital cost cap and AFUDC calculation, that are completed and used to provide service to customers in its Utility Plant In Service Account. The total cost of the projects that are not providing service to customers will be recorded in the Construction Work in Progress (CWIP) Account. Rate base for the Cal-Am facilities will be calculated by determining the sum of Utility Plant in Service and CWIP, less any grant funds and less any accumulated depreciation.

The Settling Parties propose that the Commission authorize Cal-Am to file a Tier 2 advice letter on a semi-annual basis to include all prudently expended costs related to construction of the Cal-Am facilities into rate base as either CWIP or UPIS. The semi-annual filings are to occur on May 15 and November 15 each year to allow all project expenditures through April 30 and October 31 into rate base and base rates as of July 1 (May 15 filing) and January 1 (November 15 filing). Until allowed in rate base, all project costs are to earn AFUDC. Cal-Am expects the Commission staff to process the advice letters in 45 days, subject to

[156] Exhibit 363., § 8.1.4 at 10.

true-up, if the staff review is not completed. In the year all projects are completed, Cal-Am expects to file the final advice letter as soon as possible after the facilities are completed, and expects staff to process the advice letter within 60 days. As stated in the Settlement Agreement, the "final advice letter will place the full return on and the recovery of all plant investment, including prudently incurred costs over the Cap, into rate base and base revenue requirement and rates."[157]

The parties recognize that cost allocation and rate design will be done in a separate phase of this proceeding. The Settling Parties also recommend that the Commission discontinue the Special Request 2 surcharge as defined in D.06-12-040. The Settling Parties recommend this change, because the facilities for the desalination plant and the wells will be built by the Public Agencies, the associated costs of the product water (i.e., associated with the debt service and O&M costs of the facilities) will be recovered through the Modified Cost Balancing Account, and the advice letter procedure described for the Cal-Am facilities is designed to take the place of this surcharge.

For purposes of this project, Cal-Am will calculate its non rate base investment as the difference between the total costs of the project and the sum of the costs included in rate base. As set forth in the Settlement Agreement, Cal-Am will impute a capital ratio of 50% debt and 50% equity. Cal-Am plans to calculate its cost for debt based on the weighted average embedded interest rate of Cal-Am's actual debt issuances issued to fund its facilities, including financing

[157] Exhibit 363, § 9.4.3 at 14.

costs and to calculate the cost of issuing equity by using its authorized return on equity rate (currently set at 10.20%).

On a monthly basis, Cal-Am will calculate the AFUDC, or the carrying costs for the project), by applying the actual costs of the borrowed funds and the post-tax return on equity. Cal-Am is seeking authority to record AFUDC at its pre-tax cost of capital, but will charge the after-tax cost of capital to the Cal-Am facilities. The difference between the pre-tax and after-tax cost of capital would then be booked to a regulatory asset to offset the deferred tax liability that would occur with the use of the pre-tax cost of capital. As set forth in Exhibit 113, Cal-Am has proposed an AFUDC rate of 8.40%, but Cal-Am also explains that the numbers used are for illustrative purposes. Cal-Am is seeking the actual cost of capital for this project as the rate to be applied to the AFUDC account.

According to Cal-Am, this accounting treatment is required to establish a regulatory asset to comply with financial reporting and its ability to comply with Financial Accounting Standard 109.[158] As set forth in the Section 9 of the Settlement Agreement (and corrected in Exhibit 103), Cal-Am will apply its then current cost of capital to the accrued charges for the project and a pre-tax cost of capital for the total AFUDC accrual, with the difference between the pre-tax cost of capital and the after-tax cost of capital being accrued to a regulatory asset and deferred tax liability.[159] Section 9.2 of the Settlement Agreement describes the revenue requirement calculation.[160]

---

[158] Exhibit 103 at 19.

[159] Exhibit 103 at 4.

[160] Note that Exhibit 103 at 4, Footnote 1 provides a correction to Section 9.1.2 of the Settlement Agreement.

DRA opposes Cal-Am's proposed approach to ratemaking, and argues that Cal-Am's proposal is an unacceptable hybrid of the Tier 2 Advice Letter requirements of General Order 96-B with the Distribution System Infrastructure Charge Advice Letters adopted in D.07-08-030. DRA recommends that Cal-Am file either annual Tier 3 advice letters or an application that allows DRA sufficient time to review the prudency of the facility costs. DRA is particularly concerned that the Settlement Agreement's proposed approach to reviewing prudently incurred costs: as testified to by Cal-Am witness Stephenson, it appears that DWA would review these costs and would merely ensure that the costs are validated, i.e., DWA would ensure that various costs are applicable to the various projects.[161] DRA maintains that a review for accuracy of invoices and expenses, while equivalent to the rate base offset approach established in Resolution W-4749 cannot be considered a true prudency review, which requires judgment and expert analysis. DRA argues that Commission scrutiny and judgment are required and it is not appropriate to substitute ministerial procedures for this expert approach.

DRA also opposes Cal-Am's proposal to apply the weighted cost of capital to compensate investors for the carrying costs of funds tied up in during the period between incurring project costs and placing revenue requirements into rates for recovery. DRA asserts that these short-term capital expenditures should receive a risk-adjusted two-year corporate borrowing rate of 2.46% (based on the published rating of Cal-Am's parent company, American Water Works and the two-year borrowing cost of BBB-rated issuances). DRA does not dispute

[161] DRA Opening Brief at 49, citing 12 RT at 1092.

Cal-Am's proposed approach to placing costs in rates before project completion, but asserts that this departure from the usual ratemaking approach should not also be rewarded by applying the weighted average cost of capital to AFUDC.

13.2.3. Discussion: Ratemaking for Product Water

Under the WPA, the cost of the desalinated water will have two components: the debt service associated with financing the capitalized costs of the MCWD and MCWRA-owned facilities (including design, permitting, construction, and pre-effective date costs) and the costs of operating and maintaining the facilities. Pursuant to the Settlement Agreement, these costs would be recovered through the Modified Cost Balancing Account – essentially a balancing account already established to record and recover in rates the costs of purchased water.

Parties do not oppose the general concept underlying this methodology, although there is disagreement about determining the reasonableness of these costs. Here, we find that the Commission must retain its authority to ensure that Cal-Am ratepayers are paying cost-based rates related to the Regional Project, and we must have the discretion to verify that these costs are appropriate, are project-based, and do not include any costs that would otherwise be paid by the Public Agencies in the normal course of business. At the same time, we recognize the need to ensure that Cal-Am is able to recover these costs in a timely manner.

We find that the proposed approach is reasonable. The modified Tier 2 Advice Letter filing contained in the Settlement Agreement and Water Purchase Agreement will provide Cal-Am timely recovery of expended costs. Since this amount shall be subject to true-up upon completion of staff review, the

Commission retains the ability to ensure that the costs are appropriate, project-based and should be included in rates.

Accordingly, we do not find any need to modify the Settlement Agreement and Water Purchase Agreement.

13.2.4. Discussion: Ratemaking for Cal-Am Facilities

As for the Cal-Am facilities, DRA and MPWMD do not strongly object to the Settling Parties' proposal to treat the facilities as used and useful on an ongoing basis, rather than waiting until the entire project is complete. Although unusual, we see no reason to alter this aspect of the Settlement Agreement. DRA and MPWMD do oppose certain other aspects of the ratemaking approach proposed in the Settlement Agreement for the Cal-Am facilities, particularly the interest rate to be applied to the AFUDC for this project, as well as the proposed approach to advice letters. We turn first to the AFUDC issue.

13.2.4.1. AFUDC for Cal-Am Facilities

The Settlement Agreement provides that Cal-Am will earn interest on the carrying costs tied up during construction (the AFUDC account) at its actual cost of capital for this particular project. DRA recommends that the rate of return allowed on AFUDC should be set at the current 2-year yield on BBB-rated corporate debt, or 2.46%.

Cal-Am contends that this approach would violate the Uniform System of Accounts, which explains that the definition of Interest During Construction "includes the cost of borrowed funds used for construction and a reasonable rate

upon the utilities' own funds when so used."[162] Based on this language, Cal-Am contends that the actual costs of the borrowed funds must be charged as interest during construction, not an assumed rate. Cal-Am also explains that it must issue long-term debt and use equity to finance its facilities. Cal-Am explains that it currently has a line of credit of up to $33 million and explains that this funding source is used to fund its various memorandum and balancing accounts. Under the WPA, Cal-Am is obligated to obtain a $12 million line of credit as an interim financing source for the Regional Project, as a whole. Based on the language of the Uniform System of Accounts and because of these obligations, Cal-Am asserts that the rate applied to AFUDC for this project must reflect the actual cost of debt and the authorized return on equity and should be applied to an imputed 50-50 debt and equity capital structure.[163]

Cal-Am relies on the provisions of D.08-05-036, which addressed the issue of proper rate of return on AFUDC for Cal-Am's investment in the San Clemente Dam, and we look to this decision for guidance. D.08-05-036 authorized Cal-Am to accrue interest on the San Clemente Dam memorandum account at the authorized rate of return. The Commission explained that "due to the certainty of the project as expressed in the final EIR and the policy objective of matching the regulatory costs with actual costs, the interest on the San Clemente Dam memorandum account should accrue at the authorized rate

---

[162] Exhibit 103 at 17, citing Uniform System of Accounts for Water Utilities, Class A http://docs.cpuc.ca.gov/published/Graphics/83011.PDF.

[163] The authorized return on equity for Cal-Am is currently set at 10.2%. For illustrative purposes, Cal-Am calculates the AFUDC for the Cal-Am facilities at 8.40%.

of return. Authorizing a carrying cost less than that would not reflect the risks or actual project costs."[164]

The Commission also explained that "[p]rotection is given to the ratepayers in the form a reasonableness review when the dollars are transferred out of the memorandum account into ratebase. If it can be shown that actual carrying costs are less than the authorized rate of return (i.e., closer to the cost of debt), we can make adjustments in the relevant general rate case proceeding."[165] The Commission determined that "in a case that deals with the accrual of AFUDC and significant capital costs, not merely the unanticipated expenses or the unknown expenses of typical memorandum accounts, the Commission should decide the interest rate treatment based upon the circumstances at hand and the type of financing being used to fund the project."[166] Finally, the Commission concluded:

> In today's case, we are considering a project that must move forward. The seismic risk of the San Clemente Dam must be remedied. There is no uncertainty in that. We have found that where there are regulatory compliance requirements and long-term capital outlays for a project are a foregone conclusion, it is reasonable to authorize the use of the authorized ROR [rate of return] as the AFUDC rate, and it is appropriate to undertake a reasonableness review at the completion of the project.[167]

While D.08-05-036 did not set policy regarding AFUDC for all long-term water projects, it is reasonable to rely on these previous determinations based

---

[164] D.08-05-036 at 9.

[165] Id.

[166] Id. at 11.

upon the particular circumstances at hand and the type of financing being used to fund the project.[168] It is clear that applying the authorized rate of return was determined to be the correct approach in this type of capital project, but it is also clear that ratepayers would be protected by a reasonableness review when the project was completed.

Here, Cal-Am is asking for both recovery of its authorized rate of return on the AFUDC account for Cal-Am facilities, and no reasonableness review. We cannot find that it is reasonable for Cal-Am to accrue both its authorized rate of return on AFUDC and recover capital costs up to $95 million without further reasonableness review. Assuming Cal-Am does not exceed the initial cost cap we have established today, we do not require reasonableness review of the Cal-Am facility costs before they are transferred into ratebase, and Cal-Am is essentially guaranteed recovery of these costs.

As DRA observes, "Already a significant departure from the long-standing regulatory concept of 'used & useful,' Cal-Am's proposed new category of advice letters for placing project costs into rates prior to project completion would significantly mitigate almost all uncertainty and risk associated with recovery of spending on Cal Am facilities."[169] We concur. Although the costs incurred will be tied up for some period of time, the ratemaking approach proposed by the Settling Parties allows the costs to be folded into rates semi-annually, as the project moves forward. This is a fair and equitable approach. Further, we find that Cal-Am should only charge and collect actual carrying costs. Under the

---

[167] Id. at 13.

[168] D.08-10-019, denying rehearing of D.08-05-036, at 8.

[169] DRA Opening Brief at 51.

current economic environment, we believe that the proposed AFUDC rates on the record would likely result in an under- or over-collection. Therefore, we believe that it is more appropriate to adopt an initial AFUDC rate that is more representative of current rates, and allow this rate to be trued-up to reflect actual carrying costs. Thus, we set the initial AFUDC rate at 4.00%. We direct the Settling Parties to comply with this modification and to revise the Settlement Agreement accordingly. We recognize that this is a significant modification to the Settlement Agreement, but we must ensure that ratepayers as well as shareholders are protected.

13.2.4.2. Advice Letter Procedures

The Settlement Agreement provides that Cal-Am will file a Tier 2 advice letter twice a year to recover the costs of the Cal-Am only facilities.[170] As envisioned by the Settling Parties, Commission staff would have 45 days to review the advice letter for "prudency" and the rates would go into effect, subject to true-up if the review could not be completed during that timeframe. DRA objects to the semi-annual filing, the description of what is entailed in the prudency review, and the true-up provision. Because we have established a capital cost cap on costs that can be recovered from ratepayers, we do not require the more extensive review on each filing.

We agree with Cal-Am and the Settling Parties that it is reasonable to allow semi-annual advice letter filings and that a true-up process is reasonable. This approach will provide some certainty as to cash flow, and can be adjusted

[170] General Order 96-B sets forth 3 categories of advice letters. Tier 1 advice letters are effective upon filing; Tier 2 advice letters are effective after staff review and approval; and Tier 3 advice letters are not effective unless the Commission issues a resolution so finding.

during the prudency review process. Cal-Am has stated that it will provide a summary of costs and detail the expenditures made in the prior quarter.[171] Cal-Am should also file a progress report and timeline that provides a detailed report on the permitting, construction, budget, timeline and progress report on each component of the Cal-Am facilities. As with the Regional facilities, we also require Cal-Am to update DRA and DWA on the design and refined cost estimates of the Cal-Am only facilities. Cal-Am should meet with DRA and DWA on a quarterly basis.

We agree with the Settling Parties that the ratemaking approach we authorize today eliminates the need for the Special Request 2 Surcharge authorized in D.06-12-040. No party objects to this change. As conceived by the Settling Parties, moving the Cal-Am facilities into rates as they are constructed will allow rates to "ramp up" prior to the revenue requirements that will ensue with the delivery of the product water. We note that Cal-Am has filed a petition to modify Special Request 1 Surcharge. We will address that petition for modification in a separate decision.

13.3. Additional Ratepayer Protections if the Regional Project is Not Approved

At the request of the ALJ, DRA has proposed several additional protections for ratepayers if the Regional Project is unable to be permitted and constructed.[172] First, DRA notes that under the Water Purchase Agreement, Cal-Am is responsible for reimbursement of MCWD's and MCWRA's costs and expenses incurred for the Regional Project, even if the Project is not ultimately

[172] RT at 1767.

built. In this case, DRA maintains that the $14 million in pre-effective date costs (identified in Exhibit 301, Exhibit D, and capped at $14 million in Exhibit C) should not be the responsibility of Cal-Am ratepayers. DRA suggests that if MCWRA or MCWD reject Commission modifications to the Settlement or the Water Purchase Agreement, then Cal-Am will incur additional expenses as Cal-Am develops a replacement project. If this occurs, DRA contends that it would be unreasonable for the Public Agencies to recover costs incurred to date, and indeed, disallowing recovery of these costs would provide the correct incentives to these agencies to adopt any modifications proposed by the Commission.

MPWMD goes further and suggests that certain pre-effective date costs should not be recoverable in any case. Both DRA and MPWMD recommend that the costs of MCWD's previously-planned stand-alone desalination plant, abandoned in pursuit of the Regional Project, should not be recoverable. MPWMD also argues that all pre-effective date costs should be properly documented and properly reviewed to demonstrate linkage to the Regional Project and should not include any attorneys' fees or costs for participating in Commission proceedings.[173]

DRA also proposes that Cal-Am shareholders should bear some responsibility to implement either the Moss Landing Project or the North Marina Project, if the Regional Project is not built. DRA compares this proposal to the 90/10 split between ratepayers and shareholders adopted in D.06-07-027, in which ratepayers and shareholders shared responsibility for cost overruns up to

[173] MPWMD Opening Brief at 30.

$100 million to implement PG&E's Smart Meter project. In DRA's view, such an approach would provide additional protection to ratepayers and would give Cal-Am an incentive to reduce required additional costs.

DRA also recognizes that Monterey County Code Chapter 10.72.030(B) prohibits desalination facilities from being owned by private entities. This ordinance was enacted in 1989. Because Cal-Am's 2004 application proposed that it own the desalination facilities, Cal-Am has both recognized the risk involved and also stated in Phase 1 that they did not view it as a problem.[174] Hence, DRA concludes that any required efforts to overcome legal challenges to private ownership of the desalination facilities must rest with Cal-Am's shareholders.

Finally, while making it clear that DRA fully supports the development of a fair and equitable Regional Project, DRA has also responded to the ALJ's directive to brief the issue of alternatives the Commission should consider if the Settling Parties decline to accept modifications proposed by the Commission. In this case, DRA suggests that the judge allow up to 90 days for parties to develop "alternative arrangements" for a Regional Project.[175] This approach would allow time for the Commission to convene workshops to discuss the modifications and allow parties to explore other possible approaches, such as the plant being owned by a Joint Powers Authority of the Monterey Peninsula Cities. If consensus cannot be developed after 90 days, DRA suggests that a CPCN be issued for the North Marina alternative.

---

[174] DRA Opening Brief at 55, citing 2 RT 71.

[175] DRA Opening Brief at 55.

13.3.1. Discussion: Other Ratepayer Protections

This has been a long and contentious proceeding. We have provided many opportunities for the parties to attempt to work out their differences by convening two sets of facilitated cost workshops and by requiring that all parties participate in formal ADR sessions. While parties clearly have not resolved their differences, it is also clear that these opportunities have resulted in increased understanding about the definitions of terms and more precise and collaborative approaches to modeling and cost development. Despite many collaborative approaches, the parties appear to be bitterly divided over certain issues in this proceeding. The Public Agencies' recovery of pre-effective date costs is one such issue. Here, we must separate the facts from the rhetoric to render our determination.

The Public Agencies, in effect, contend that they have stepped into the shoes of Cal-Am, in order to fulfill the requirements of this public-private partnership to provide water on the Monterey Peninsula. No party disagrees that the Regional Project is the preferred approach, and no party disagrees that MCWD and MCWRA are required participants in the Regional Project.

While DRA and MPWMD contend that prior costs associated with MCWD's stand-alone desalination plant should be disallowed, MCWD asserts that this previously-planned plant was an important catalyst to the Regional Project. MCWD asserts that the Commission required its participation in this proceeding, and explains that its participation in the Regional Project dates back to the initial REPOG process. As MCWD sees it:

> When a public agency undertakes a water project, it customarily recovers all of its reasonable, project-related development costs when it bonds or otherwise finances the project, with those costs ultimately being borne by ratepayers. That is just and reasonable because the costs recovered by the

> agency are part of the costs of the water supply project and hence the costs of providing the water. Notably, such project development costs do not normally include the costs of legal representation in a proceeding before the Commission, nor do they include the necessity of countless meetings and negotiations with other parties, including DRA, because public agencies are not normally required to appear before the Commission in proceedings like this one. MCWD and MCWRA should not be punished because they have partnered with CAW, a Commission-regulated water company, in developing the Regional Desalination Project and participating before the Commission in this proceeding.[176]

We stated in D.10-08-008 that we would make a final determination on the recovery of legal costs at issue in the Reimbursement Agreement discussed in A.09-04-015.[177] DRA and MPWMD object to Cal-Am ratepayers funding the litigation costs of the Public Agencies. DRA contends that if the Regional Project is not permitted or constructed, Cal-Am ratepayers should not be required to fund any of the Public Agencies' pre-effective date costs. MPWMD contends that ratepayers should not be responsible for any of these costs, in any case.

As we noted in D.10-08-008, Cal-Am explains that the Commission has previously approved co-funding of projects with public agencies.[178] For example, in D.06-11-050, we approved a special conservation surcharge to fund activities undertaken by MPWMD. The Commission has also authorized administrative costs of water utilities to be paid for by electric utility ratepayers.[179] Although

---

[176] MCWD Opening Brief at 53.

[177] An application for rehearing of D.10-08-008 is pending. Our determinations today in no way prejudge our adjudication of that application for rehearing.

[178] D.10-08-008 at 17.

[179] D.10-04-030 at 12.

the amounts involved were much smaller, Cal-Am argues that just as the energy efficiency programs authorized for energy and water utilities ultimately benefited electric ratepayers, so too do the Public Agencies' administrative and legal costs benefit Cal-Am ratepayers because these costs are required to allow the development of the Regional Project.

We find that the Public Agencies' participation in the Regional Project is vital to the success of this project, and therefore, the pre-effective date costs incurred to date, including the legal costs, should be recoverable. The pre-effective date costs are included as a line item in the calculation of the most probable estimated cost included in Exhibit C to the Settlement Agreement, and are not expected to exceed $14 million, with approximately half of those costs incurred though year-end 2009 (Exhibit D to the Settlement Agreement). We cannot anticipate every contingency, but at this point, we would be reluctant to authorize recovery of pre-effective date costs greater than $14 million.

MCWD must provide detailed workpapers to demonstrate that all costs associated with its desalination plant project were reasonably incurred and are relevant to the Regional Project. These should be provided in the Status Reports. We expect that all costs included in the Reimbursement Agreement approved in D.10-08-008 will be repaid by the Public Agencies, as provided for in the Reimbursement Agreement. We will carefully review such requests if Cal-Am files an application for additional capital cost recovery and will expect thorough documentation and detailed workpapers to be provided.

We need not address the other proposals from DRA at this time. We are hopeful that with our approval today, the Regional Project can go forward without delay.

14. Conclusion

We find the Settlement Agreement and Implementing Agreements are reasonable in light of the entire record, in compliance with the law, and in the public interest. We agree with the Settling Parties: time is of the essence to ensure that the Regional Project can be permitted, financed, and constructed, and authorize Cal-Am's participation in the Regional Project and issue a CPCN for the Cal-Am facilities.

As the Settling Parties have already agreed, we require Cal-Am to submit regular status reports on the permitting, financing, design, bidding, and construction of the Regional Project to the Executive Director and to the Director of DWA. We also require Cal-Am to meet quarterly with DRA and DWA staff. No modification is required to effectuate this requirement.

The Settlement Agreement and the Water Purchase Agreement we approve today have far-reaching consequences. While we cannot bind future Commissions, as DRA points out, we are guided by the Commission's findings in D.06-09-040:

> We realize that Commission precedent establishes that we cannot bind the actions of future Commissions and we will not comment on the consequences of a future Commission's changing of the terms of the settlement. However, we believe the settlement is a fair, just, and reasonable compromise of many difficult and potentially costly problems facing Fruitridge Vista and its customers. We believe it is in the best interest of Fruitridge Vista and its customers that the settlement agreement be implemented as adopted by our decision. Therefore, we state our intent that all future Commissions recognize and give full consideration and weight to the fact that this settlement has been approved

> based on the expectations and reasonable reliance of the parties and this Commission that all of its terms and conditions will be implemented by future Commissions.[180]

We find that this guidance is valuable and include it in this decision as a Conclusion of Law.

A subsequent phase of this proceeding will address the cost allocation and rate design associated with the Coastal Water Project. The assigned Commissioner and ALJ will set a prehearing conference to determine the schedule for these issues. As the Settling Parties have noted, it will be important to consider the impact of this costly project on the low-income residents of Monterey County and we look forward to creative approaches to mitigating the associated rate impacts.

15. Comments on Proposed Decision

The alternate proposed decision of Commissioner Bohn in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code, and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. In compliance with the ALJ's Ruling of October 21, 2010, comments were timely filed on November 17, 2010 by Cal-Am, MCWD, MCWRA, Citizens for Public Water, the Public Trust Alliance, DRA, and MPWMD. Reply comments were timely filed on November 22, 2010 by Cal-Am, MCWD, MCWRA, the Public Trust Alliance, DRA, MPWMD, and the City of Monterey.

We have addressed the substance of the comments throughout this decision and made various changes, as appropriate. We have given no weight to

---

[180] D.06-09-040 at 26-27.

arguments or proposals put forth only in ex parte communications. We have made various changes throughout the decision, reflecting factual, legal, and technical errors, pursuant to Rule 14.3 (c).

The Alternate Proposed Decision had proposed the following modifications to the Settlement Agreement and the Water Purchase Agreement:

1. The capital cost cap for the Regional Project facilities was limited to $224.4 million, with a cost cap ceiling of $272.5 million, beyond which cost recovery from Cal-Am's ratepayers would be allowed upon a showing of exceptional circumstances and subject to a rigorous reasonableness review.
2. The idea of a fees "limit" was removed and any fees charged by MCWD for new connections as the former Fort Ord area is developed should be contributed to offset the indebtedness of the Regional Project, which will reduce overall costs to Cal-Am ratepayers.
3. MCWD was directed to make an additional $3 million contribution associated with the intangible benefits it receives from its participation in the Regional Project.
4. Because the financing plans are not final, the Settlement Agreement and Water Purchase Agreement were modified to require Cal-Am to file and serve the financing plans in this proceeding. However, to the extent that the financing plan determines that the cost of debt will not exceed 6%, the debt service coverage is set at 1.0 and that State Revolving Funds or grants can be accessed, the filing would be considered a notice in this proceeding, without further review. While not asserting jurisdiction over the Public Agencies, if the terms of the financing plan exceed these limits, the financing plan would be subject to Commission review and approval.
5. A capital cost cap of $95 million was adopted for the Cal-Am only facilities, with a cost cap ceiling of $106.875 million, beyond which recovery from ratepayers would be allowed upon a showing of exceptional

circumstances and subject to a rigorous reasonableness review.

6. To the extent that the capital cost caps were exceeded but were less than the cost cap ceilings we place on the Regional Facilities and the Cal-Am-owned facilities, Cal-Am was required to file an application to justify why ratepayers should pay for additional costs. These applications must be fully documented and supported. Review of such requests would include review the impact of financing on the overall cost of the Regional Project in those proceedings.
7. If the capital costs for the Regional Facilities or the Cal-Am-owned facilities exceed the cost cap ceilings established by this decision, Cal-Am would file an application to explain the extraordinary circumstances under which these costs have been incurred and justify why they should be recovered from ratepayers.
8. Three modifications were made to the advice letter procedure proposed by the Settling Parties. First, we required Cal-Am to file Tier 3 advice letters to recover its purchased water costs and provided 120 days for staff to process these advice letters. Second, for Cal-Am facilities, we required Tier 3 advice letters and required 120 days for staff processing of these advice letters. Finally, we revised the procedure for the final advice letter filing.
9. We agreed with DRA to review O&M costs in a separate phase of this proceeding, or in a successor proceeding.

Based on comments filed by Cal-Am, MCWD, MCWRA, we are persuaded that these modifications are not necessary to ensure that Cal-Am ratepayers will be provided an adequate supply of water at a reasonable price. Accordingly, we have removed or altered these modifications and approve the Settlement Agreement and Implementing Agreements as proposed.

16. Assignment of Proceeding

John A. Bohn is the assigned Commissioner and Angela K. Minkin is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. Cal-Am is a Class A investor-owned water utility, regulated by this Commission. Its Monterey District serves most of the Monterey Peninsula, including Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, as well as the unincorporated areas of Carmel Highlands, Carmel Valley, Pebble Beach, and the Del Monte Forest.

2. Cal-Am supplies the Monterey District with surface water and groundwater from the Carmel River System and the coastal subarea of the Seaside Groundwater Basin (also known as the Seaside Basin). Cal-Am also operates three small independent water systems along the Highway 68 corridor east of Monterey that draw water from the Laguna Seca subarea of the Seaside Basin.

3. Water supply has long been constrained due to frequent drought conditions on the semi-arid Monterey Peninsula, which obtains its water supply solely from rainfall. In addition, as described in the FEIR, seawater intrusion and excess diversion have existed for decades, first identified in the late 1930s and documented by the State of California in 1946.

4. According to the FEIR, as of 1995, Cal-Am served approximately 105,000 customers in its Monterey District, supplying them with approximately 17,000 afy. Of this amount, approximately 14,106 afy was supplied from the Carmel River system and 2,700 afy was supplied from the Seaside Basin. Today, there are approximately 39,000 metered connections in the Monterey District.

5. In 1995, the SWRCB issued its Order No. WR 95-10, which concluded that although Cal-Am had been diverting 14,106 afy from the Carmel River, it has a legal right to only 3,376 afy from the Carmel River system, including surface water and water pumped from the Carmel Valley wells.

6. The SWRCB ordered Cal-Am to replace what SWRCB determined to be unlawful diversions of 10,730 afy from the Carmel River with other sources and through other actions, such as conservation to offset 20 percent of demand.

7. In 2006, the Monterey County Superior Court issued a final decision regarding adjudication of water rights of various parties who use groundwater from the Seaside Basin. (*California American Water v. City of Seaside et al.*, Case No. 66343). The court's decision established physical limitations to various users' water allocations to reduce the drawdown of the aquifer and prevent additional seawater intrusion and set up a Watermaster to administer and enforce the Court's decision.

8. Cal-Am is currently allocated 3,504 afy from the Coastal subarea of the Seaside Basin and 345 afy from the Laguna Seca subareas. These allocations will be reduced over time until they eventually reach 1,474 afy from the overall Seaside Basin. Prior to the Seaside Basin adjudication, Cal-Am's allocation for the Coastal subarea was 4,000 afy.

9. In 2006, the MPWMD issued a technical memorandum, updating the demand in Cal-Am's service territory. In sum, the replacement water supply required to meet total updated demand is 12,500 afy.

10. The Carmel River provides a habitat for the California red-legged frog and the South Central California Coast steelhead trout, both of which are listed as threatened under the Federal Endangered Species Act.

11. Both the USFWS and NOAA Fisheries contend that any entity that pumps water from the Carmel Valley Aquifer may be liable for a "take" because such pumping may alter the riparian habitat, affect the steelhead's ability to migrate, and affect the red-legged frog's ability to mature.

12. Cal-Am has entered into a Conservation Agreement with NOAA Fisheries, with the long-term goal of procuring an alternative water supply source to reduce withdrawals from the Carmel Valley Aquifer.

13. The focus of Phase 2 of this proceeding is the selection of a long-term water supply solution to address the water shortfall for Cal-Am's Monterey District and to explore a regional alternative to Cal-Am's Coastal Water Project, as directed in D.03-09-022.

14. An EIR is an informational document to inform the Commission, responsible and trustee agencies, and the public in general, of the environmental impacts of the proposed project and alternatives, design a recommended mitigation program to reduce any potentially significant impacts, and identify, from an environmental perspective, the preferred alternative.

15. In addition to this Commission, many federal, state, and local agencies are involved in the regulation of water, water rights, and water supply on the Monterey Peninsula, including, but not limited to, the State Water Resource Control Board, the Monterey Peninsula Water Management District, the Marina Coast Water District, the Monterey County Water Resources Agency, the Monterey Regional Water Pollution Control Agency, the Monterey Regional Waste Management District, and the Seaside Groundwater Basin Watermaster.

16. The Marina Coast Water District's service territory is north of and adjacent to Cal-Am's service territory in the Monterey Peninsula. MCWD provides water

and sewer service to the City of Marina and the former Fort Ord community, from its existing facilities.

17. The Monterey Regional Water Pollution Control Agency operates the regional wastewater treatment plant located north of Marina and also operates the regional recycling treatment plant located at the same facility.

18. Under contract to the Monterey County Water Resources Agency, the Monterey Regional Water Pollution Control Agency distributes recycled water to agricultural customers for irrigation on 12,000 acres in Castroville. This recycled water has been paid for by the agricultural customers in the Salinas Valley and is known as the Castroville Seawater Intrusion Program.

19. The Monterey Regional Waste Management District (MRWMD) operates the solid waste management facilities adjacent to the proposed Regional Project. In conjunction with the Monterey Regional Water Pollution Control Agency, the Waste Management District captures landfill gas and uses it as fuel in an existing cogeneration facility.

20. Many of the Public Agencies charged with managing water resources on the Monterey Peninsula have inter-related missions and, to a certain extent, overlapping supervisory boards.

21. No party disputes the need to find an alternative water supply to replace Cal-Am's water supplies that are drawn from the Carmel River, in order to ensure that Cal-Am complies with State Water Resource Control Board SWRCB Order 95-10, the Seaside Basin adjudication, and the State Water Resource Control Board Cease and Desist Order.

22. There is a need for additional water supply, over and above any water savings that can be accomplished through conservation, use of recycled water, or prohibition of potable water for landscape irrigation.

23. Past efforts to solve the long-standing water supply issues on the Monterey Peninsula have not been successful, including the proposed New Los Padres Dam and Reservoir proposed by the Monterey Peninsula Water Management District in 1989, but turned down by the voters in 1995 and the Carmel River Dam proposed by Cal-Am in 1997, which was effectively halted by AB 1182 (Stats. 1998, Ch. 797).

24. In 2002, the Commission completed a water supply contingency plan, known as "Plan B," which concluded that a combination of desalination and aquifer storage and recovery could produce 10,730 afy. Cal-Am determined that the Carmel River Dam was no longer a viable project and, in 2004, filed the instant application, which was amended in 2005.

25. When the Coastal Water Project is online, Cal-Am generally plans to utilize the majority of its Carmel River right to provide a base supply for the system during the winter. The Seaside groundwater allocation would provide a base supply in the summer.

26. Excess Carmel River water and desalinated water would be injected and stored in the Seaside Basin aquifer storage and recovery system in the winter for extraction during the summer to meet summer average and peak day demands. Desalinated water would be then used to supplement remaining demand.

27. Desalinated water is extremely expensive, both in terms of capital costs and in terms of ongoing operations and maintenance costs.

28. We continue to encourage parties to search for all possible water supplies that can reduce the need for desalinated water, as the additional components of the Regional Project, Phase 2 are studied and analyzed.

29. The FEIR sets forth three water supply projects that have been analyzed at an equal level of detail, each of which can satisfy the following project objectives:

- Satisfy Cal-Am's obligations to meet the requirements of State Water Resource Control Board Order 95-10;
- Diversify and create a reliable drought-proof water supply;
- Protect the Seaside basin for long-term reliability;
- Protect listed species in the riparian and aquatic habitat below San Clement Dam;
- Protect the local economy from the effects of an uncertain water supply;
- Minimize water rate increases by creating a diversified water supply portfolio;
- Minimize energy requirements and greenhouse gas emissions per unit of water delivered to the extent possible;
- Explore opportunities for regional partnerships, consistent with D.03-09-022; and
- Avoid duplicative facilities and infrastructure.

30. In addition to the primary objectives described above Phase I of the Regional Project is designed to address the following objectives and opportunities:

- Satisfy MCWD's obligation s to provide a water supply adequate to meet the approved redevelopment of the former Fort Ord;
- Satisfy MCWRA's obligation to maintain hydrologic balance of the Salinas Groundwater Basin;
- Satisfy MCWRA's obligation to protect agricultural water users' utilization of water resources;
- Maximize regional reliability;
- Maximize use of recycled and freshwater sources;
- Maximize funding opportunities through regional cooperation; and
- Integrate urban, agricultural and environmental objectives.

31. While each of the three projects analyzed in the FEIR would provide the majority of water required, none would meet total demand on their own. There are certain other project components and measures that are assumed to be operational under all of the alternatives studied in the FEIR.

32. The Moss Landing Project would be sited on 16 acres at the Moss Landing Power Plant and would be owned and operated by Cal-Am. The proposed project includes a desalination plant sized to produce 10 mgd of desalinated water. The proposed project also includes a seawater intake system using source water supplied from the existing Moss Landing Power Plant once-through cooling water return system, an open-water brine discharge system through the Moss Landing Power Plant, and a variety of conveyance and storage facilities, including approximately 28 miles of pipeline and an aquifer storage and recovery system. The aquifer storage and recovery system consists of two existing and two proposed injection/extraction wells.

33. The proposed project would produce 8,800 afy of desalinated water in non-drought years (and 10,900 afy in drought years) that would be delivered to Cal-Am's Terminal Reservoir for distribution to its customers.

34. The Moss Landing Project's open intake and once-through cooling design is environmentally controversial and subject to increasingly restrictive regulations.

35. The proposed project and the alternative projects include certain storage, delivery and distribution components that would be owned and operated by Cal-Am. Because these elements are common to all projects, these are known as "common" components, or the Cal-Am only facilities.

36. The North Marina alternative consists of much of the same infrastructure described for the Moss Landing Project.

37. The North Marina alternative would be owned and operated by Cal-Am, but the desalination plant would be sited on 10 acres at the Armstrong Ranch and sized to produce 11 mgd of desalinated water.

38. The North Marina alternative utilizes a seawater intake system consisting of six new subsurface beach slant wells, an open-water brine discharge system through the existing Monterey Regional Water Pollution Control Agency outfall, a project water conveyance and storage infrastructure, including several miles of pipeline and an aquifer storage and recovery system, as described above. The main differences between the Moss Landing Project and the North Marina alternative are location and size of the desalination plant, the intake technology, and the outfall.

39. The North Marina alternative would produce 8,800 afy of desalinated water in non-drought years (and 10,900 afy in drought years) that would be delivered to Cal-Am customers. The desalination plant is larger, because any source water that originated from the Salinas Valley Groundwater Basin would be returned to the Basin through deliveries to the Castroville Seawater Intrusion Project.

40. Because groundwater modeling indicates that source water pumped from the slant wells over the long term could include a small amount of intruded groundwater from the Salinas Valley Groundwater Basin, the North Marina alternative includes a provision for excess desalinated water to be returned to the Salinas Valley Groundwater Basin via the Castroville Seawater Intrusion Project's storage pond. Thus, desalinated water would be delivered to the Cal-Am Terminal Reservoir for distribution to its customers and to the storage pond for distribution to the Salinas Valley Groundwater Basin.

41. The Regional Project analyzed in the environmental documents was developed after extensive public input through the establishment of several community-based working groups, in a process initiated by DRA and now known collectively as the Water for Monterey County Coalition.

42. The Regional Project has been envisioned as having two phases, and Phase 1 is analyzed at a level of detail consistent with the proposed project and the North Marina alternative.

43. Due to the legal constraints on diversions from the Carmel River and the Seaside Basin, Phase 1 of the Regional Project would provide "regulatory replacement" water supply of 15,200 afy (12,500 afy to Cal-Am customers and 2,700 afy of water supply to the Ord Community); therefore, Phase 1 is the first priority for project implementation.

44. Phase 1 of the Regional Project includes previously analyzed and permitted water supply projects that will be undertaken whether or not the Coastal Water Project is implemented. These projects include the Sand City desalination plant, the Regional Urban Water Augmentation Project, and two existing aquifer storage and recovery wells, as well as potential demand offset of up to 1000 afy from conservation.

45. New aspects of Phase 1 of the Regional Project that were analyzed in the environmental documents include a 10-mgd desalination plant, to be owned and operated by MCWD and six vertical intake wells to provide source water. The desalinated water (8,800 afy in non-drought years and 10,900 afy in drought years) would be delivered to the Cal-Am Terminal Reservoir system for distribution to its customers and to the MCWD system (approximately 1,700 afy in non-drought years) for distribution to its customers. We refer to these new components as the Regional Project in this decision.

46. Phase 2 of the Regional Project has been studied at a more general or programmatic level, consistent with the information that is available at this time. As explained in the FEIR, the components of Phase 2 of the Regional Project have been included for context and for informational purposes; they would not function as an alternative that would meet the project objectives and are not subject to our approval at this time.

47. The CEQA Findings of Fact are attached as Appendix B, and accurately reflect the independent analysis contained in the FEIR, the Commission's policy decisions, as well as other information in the record, and are supported by substantial evidence in the administrative record.

48. As to the Cal-Am portion of the Regional Project, we find that changes or alterations have been required in, or incorporated into, the Regional Project which avoid or substantially lessen the significant environmental effects identified in the FEIR.

49. As to the non Cal-Am portions of the Regional Project, we find that the applicable and feasible mitigation measures described in the CEQA Findings can and should be (and in most cases, already have been) imposed as conditions of approval by MCWD, MCWRA and/or MRWPCA on the Regional Project.

50. We further find that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives that are not required in, or incorporated into, the Regional Project.

51. Implementation of the No-Project Alternative would eliminate all of the impacts for the three projects analyzed in the FEIR. However, the resulting water supply deficit would lead to severe rationing and likely water shortages. These conditions, in turn, would likely have significant effects on the local economies within the Monterey Peninsula.

52. The No-Project Alternative would fail to meet any of the Coastal Water Project objectives, including the objective to protect the local economy from the effects of an uncertain water supply.

53. The alternatives considered in the FEIR include several basic elements: a desalination plant, a water intake mechanism, a brine outfall mechanism, desalinated water conveyance and storage infrastructure, and aquifer storage and recovery.

54. In selecting the environmentally superior alternative, the FEIR considered the environmental impact of each project, which of the projects evaluated in the FEIR had the fewest significant-and-unavoidable impacts, and which, if any, of the proposed alternatives would lessen or eliminate any significant-and-unavoidable or potentially-significant-but-mitigable impacts.

55. The FEIR has identified the North Marina Alternative as environmentally superior to the Moss Landing Project in terms of the scope of the environmental effects.

56. The North Marina Alternative and the Regional Project are nearly equal in their level of environmental impacts. There are two impacts that factor into the determination of the environmentally-superior alternative: operation-related greenhouse gas emissions and construction-related particulate matter greater than 10 microns (PM10).

57. Because Marin Coast Water District and Monterey County Water Resources Agency would implement the Regional Project and because these Public Agencies are not under this Commission's jurisdiction, the FEIR reasonably concludes that we cannot ensure compliance with the mitigation efforts to ensure that the outcome would result in less-than-significant impacts.

58. The FEIR classifies the greenhouse gas emissions and the construction-related particulate matter impacts as significant and unavoidable, and also concludes that if the Public Agencies agree to implement all of the mitigation measures, the Regional Project, would be the environmentally superior alternative.

59. Because of the Cease and Desist Order, we find that time is of the essence, in terms of developing a new water supply to replace unauthorized withdrawal of water from the Carmel River.

60. The Marina Coast Water District has certified that it has considered the FEIR pursuant to §§ 15050(b) and 15096(f) of the CEQA Guidelines and has issued a Statement of Overriding Considerations, because the need for water overrides potentially significant, unavoidable impacts related to air quality from construction and greenhouse gas emissions from operation of the MCWD facilities for the Regional Project.

61. The Monterey County Water Resources Agency has issued a Statement of Overriding Considerations with respect to the following environmental impacts: 1) the emission of criteria pollutants during construction activities; 2) the net increase of particulate matter greater than 10 microns associated with construction activities; and 3) potential conflict with the goal of reducing greenhouse gas emissions, consistent with the requirements of AB 32 (Stats. 2006, ch. 488), and covering cumulative air quality and noise impacts.

62. Because we have determined that the mitigation measures for construction-related particulate matter greater than 10 microns for any of the projects are infeasible due to the urgency of the need for a new water supply, we consider only the greenhouse gas emissions in considering the environmentally superior project.

63. On balance, we concur with the FEIR's identification of the North Marina Alternative as the environmentally superior alternative, albeit by a very narrow margin, because of the greenhouse gas emissions associated with operations of the desalination plant.

64. As required by CEQA, we cannot approve the proposed project or an alternative unless we find that the project has been modified to mitigate or avoid each significant effect on the environment or that specific considerations make the mitigation measures or alternatives identified in the FEIR infeasible; and specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

65. We find that the Regional Project is the most feasible alternative that provides a viable solution to the water constraints on the Monterey Peninsula, given the adverse social and economic consequences associated with taking no action or delayed action, in the timeframe imposed by the State Water Resource Control Board's Cease and Desist Order, meets the restrictions on ownership of a desalination plant in Monterey County, and satisfies the prohibitions on exporting water from the Salinas Basin, and certain technological factors.

66. Because we are approving the Regional Project and do not have jurisdiction over The Marina Coast Water District or the Monterey County Water Resources Agency, this Commission cannot guarantee that the Public Agencies involved will comply with the mitigation measures adopted in this decision.

67. Significant and unavoidable environmental impacts will result from operation of the Regional Project; however, the Commission has adopted all feasible mitigation measures, as set forth in Appendix C.

68. The FEIR includes the Addendum to the FEIR, issued on March 24, 2010, and received into evidence on June 14, 2010.

69. The Addendum was issued to address errata in the text of the FEIR. None of the errata recommend any changes to the project or to the level of significance of impacts or to mitigation measures. The Addendum also presents and responds to seven additional comment letters that were inadvertently omitted from the published FEIR. None of the letters or responses have raised or identified any issues that would require changes to the FEIR as published.

70. The benefits of the Regional Project outweigh and override its significant and unavoidable impacts, for the reasons set forth in the statement of overriding considerations in the CEQA Findings.

71. The Marina Coast Water District and the Monterey County Water Resources Agency recognize the importance of the mitigation measures identified in the FEIR and acknowledge their intention that development, construction, and operation of the Regional Project must occur in accordance with the mitigation measures adopted by their respective agencies.

72. The Settlement Agreement states that the Regional Project provides the most expeditious, feasible and cost-effective alternative to address the water supply constraints on the Monterey Peninsula.

73. The Settling Parties maintain that time is of the essence, both because of the pending Cease and Desist Order and because there are financing opportunities that may be lost if the Regional Project is delayed.

74. The Monterey County Water Resources Agency will construct, own, operate, and maintain the brackish source water wells that will provide the feedwater for the desalination facility, as well as the conveyance pipeline to the desalination facility.

75. The Marina Coast Water District will construct, own, operate, and maintain the desalination plant and transport the desalinated water to a delivery

point within its service territory. At that point, the Marina Coast Water District will receive a portion of the water and Cal-Am will receive a portion of the water.

76. Cal-Am will construct, own, maintain, and operate three large diameter conveyance pipelines, two distribution storage reservoirs, and aquifer storage and recovery facilities; all of these facilities will provide the infrastructure to serve its customers with the desalinated water (also known as product water).

77. The brine from the desalination plant would be discharged through the outfall owned and operated by the Monterey Regional Water Pollution Control Agency.

78. The Marina Coast Water District has exercised an option which it held, and acquired 224 acres of land on the Armstrong Ranch north of Marina, adjacent to the regional wastewater treatment plant operated by the Monterey Regional Water Pollution Control Agency and the regional landfill operated by the Monterey Regional Waste Management District shown in the FEIR as the proposed location for the desalination plant for the Regional Project.

79. Because the source water cannot be exported from the Salinas Valley, this factor becomes a critical component to the Regional Project.

80. The Monterey County Water Resources Agency must satisfy the requirements of the Agency Act and protect the farmers and agribusinesses that participate in and fund the Salinas Valley Reclamation Project, Castroville Seaside Intrusion Project, and the Salinas Valley Water Project.

81. The Settlement Agreement includes two implementing agreements: a Water Purchase Agreement and an Outfall Agreement. The Water Purchase Agreement provides extensive detail as to each parties' rights and

responsibilities, and addresses the design, construction, and permitting of the components of the proposed Regional Project.

82. The Water Purchase Agreement has an initial term of 34 years, and, in accordance with its terms, 6 automatic renewal terms of 10 years each.

83. The Water Purchase Agreement requires the construction of test wells, the data from which will be analyzed by the Monterey County Water Resources Agency to ensure compliance with the Agency Act.

84. The Marina Coast Water District and the Monterey County Water Resources Agency will endeavor to secure cost-effective financing for the Regional facilities, including low-cost SRF loans, as well as grants, where available, which, if obtained, will lower the cost of the Regional Project. Cal-Am will provide shortfall financing for the project, if necessary.

85. Pursuant to the Outfall Agreement, the Marina Coast Water District will connect and use capacity in the ocean outfall components of the Monterey Regional Water Pollution Control Agency's regional treatment plant to carry the reject water and brine discharged from the desalination plant.

86. Costs related to the construction of a connection from Marina Coast Water District's facilities to a brine receiving facility that connects to Monterey Regional Water Pollution Control Agency's outfall facilities are included in the costs of the Regional Project, to the extent they are attributable to and used for the discharged brine from the Regional Project.

87. The Outfall Agreement also provides for a one-time capacity charge, an annual usage fee, a reimbursement for fair and reasonable operation and maintenance costs attributable to the use of the brine-receiving facility and the outfall discharge, as well as capital repair and replacement costs. Costs incurred

by the Marina Coast Water District under the Outfall Agreement are included in calculating the cost of the Regional Project's desalinated product water.

88. The term of the Outfall Agreement is 34 years, with 6 automatic 10-year renewals.

89. Whether the facilities are owned and operated by the Public Agencies or Cal-Am, the majority of the costs of the entire project are expected to be borne by Cal-Am ratepayers.

90. The Marina Coast Water District's and the Monterey County Water Resources Agency's costs of constructing and operating their portions of the Regional Project facilities will be included in the calculation of the costs of the desalinated water (or product water), which will be charged to Cal-Am under various provisions of the Water Purchase Agreement.

91. All costs incurred by the Marina Coast Water District under the Outfall Agreement that directly pertain to the Regional Project facilities will be included in the cost of the product water.

92. Costs for the Regional Project include capital costs, financing costs, costs of obtaining indebtedness, a reserve fund for needed replacements, contingency costs, and operations and maintenance costs.

93. Cal-Am will include costs related to the construction of its facilities in rate base, either as Construction Work in Progress or Utility Plant in Service. Settling Parties propose that all project costs will earn a return on the carrying costs for the project as AFUDC until such time as they are allowed in rate base.

94. As proposed, each entity is responsible for the permitting, design, and construction of the facilities they will own.

95. In order to ensure coordination, the parties plan to jointly select and hire a project manager to manage the permit, design, engineering, and construction process, and to ensure that the proper coordination takes place.

96. As proposed in the Water Purchase Agreement, Cal-Am, Marina Coast Water District and Monterey County Water Resources Agency will form an Advisory Committee to ensure coordination with respect to the permitting, design, and construction of the Regional Project.

97. The Settling Parties request that the Commission approve a capital cost cap of $297.47 million (escalated to mid-2012 $) that excludes interest during construction and any debt service coverage required to obtain financing for the Regional Project.

98. We concur that the bidding selection, procurement process, and evaluation of proposals described in Sections 4.2 and 4.3 of the Water Purchase Agreement and the additional cost management features described in Section 4.3 are reasonable provisions that will help ensure that the Regional Project is as cost-effective as possible.

99. The Settling Parties have agreed to hire a certified value engineer to review plans at particular points. As defined, value engineering is a specialized cost control technique in which the owner or operators meet and confer with a certified value specialist to conduct a systematic and creative analysis of the functions of a project or operation to determine how best to achieve the necessary function, performance, and reliability of the project at the minimum life cycle cost.

100. In addition to the detailed contracting provisions and cost management goals, the Water Purchase Agreement provides a detailed roadmap for hiring of a project manager, preparing preliminary design documents, obtaining required

permits, and establishing milestones for each of the facilities. Section 4 also provides for a Constructability Review (§ 4.6) and Inspection and Audit Rights (§ 4.11).

101. Under the Water Purchase Agreement, the cost of the desalinated water will have two components: the debt service associated with financing the capitalized costs of the facilities owned by the Public Agencies (including design, permitting, construction, and pre-effective date costs) and the costs of operating and maintaining these facilities.

102. Pursuant to the Settlement Agreement, Cal-Am will fund these costs through an escrow account and will then recover the costs through the Modified Cost Balancing Account – essentially a balancing account already established to record and recover in rates the costs of purchased water.

103. Based on the record before us, we cannot find that a $2,200 per-acre-foot cost cap is reasonable or would serve the public interest, because the evidence does not demonstrate that DRA included all necessary costs associated with desalination plants in developing its estimated cost cap.

104. Because of the public financing opportunities, we find that the Public Agencies bring benefits to the Regional Project that would not be achieved by Cal-Am ownership of either the Moss Landing Project or the North Marina Project; in addition, litigation related to private ownership of the desalination plant and compliance with the Agency Act could ensue with either the Moss Landing Project or the North Marina Project.

105. The preponderance of the evidence demonstrates that MCWD does not need the desalinated water now, nor is it clear when it may be needed in the future. We find that there are reasonable checkpoints built into the WPA to ensure that Cal-Am will receive its needed allocation of water, including

requirements to notify Cal-Am and the Advisory Committee regarding the planned water supply and deliveries of water.

106. The $297.5 million proposed capital cost cap represents the Settling Parties' approximation of the various cost components of the Regional Project facilities, assuming that slant wells are used as source water intake facilities.

107. The costs of the various components have been assessed and analyzed in various forums and that parties – while perhaps not agreeing – have had the opportunity to understand and debate the derivation of the cost components.

108. Article XIII, § 6, subd. (b) of the California Constitution establishes the requirements for setting rates and charges by local governments.

109. As public agencies, MCWD and MCWRA are subject to the requirements of the Brown Act (Government Code Sections 54950 et seq.) and the California Public Records Act (Government Code Sections 6250 et seq.).

110. MCWRA must comply with the Monterey Water Resources Agency Act (Chapter 52 in the California Water Code Appendix), which requires public hearings prior to adopting a budget.

111. MCWD and MCWRA have existing procedures to provide for public participation and input in the establishment of their budgets and the setting of rates.

112. The $297.5 million cost cap proposed by Settling Parties, and adopted in this decision, represents the estimated upper cost limit for the Regional Desalination Project.

113. The Settling Parties acknowledge that a financing package is not finalized and explain that they are evaluating several options for obtaining a financing package that will reduce the costs of indebtedness, including accessing State Revolving Fund financing and federal grants.

114. It is our understanding that Cal-Am, Marina Coast Water District, and the Monterey County Water Resources Agency each intend to analyze the final financing package within 120 days of the Effective Date of the Water Purchase Agreement and will advise their respective governing Boards to approve a package based on the total amount of funding, cost of the funding (including interest rate, term, and reserve requirements), flexibility, and any restrictions imposed by particular financing alternatives.

115. Use of low-interest SRF loans and federal grants would reduce the cost of indebtedness. Any financing alternative that reduces the cost of Project indebtedness will flow through to ratepayers by reducing the cost of the desalinated water.

116. While use of SRF loan and grant opportunities are not guaranteed, Cal-Am would not have the ability to access such funding opportunities. This is a potential benefit to ratepayers that we cannot ignore.

117. Depending on the length of the construction period and the financing plan that is eventually in place, the Regional Project may not necessarily be the least-cost alternative, but it is the most feasible project that will ensure a replacement water source in a timely manner, i.e., prior to the enactment of the water restrictions in the Cease and Desist Order.

118. While the Settling Parties have stated concerns that establishing a capital cost cap could impact the competitive bidding process and could also impact the cost of financing, they acknowledge that a capital cost cap is one way to ensure that the Settlement Agreement is in the public interest.

119. We concur that a capital cost cap is required and find that adopting a capital cost cap of $297.5 million will provide the proper motivation to ensure that the Regional Project facilities are as cost-effective as possible.

120. We encourage parties to thoroughly assess cost allocation and rate design methodologies that can be considered to protect Cal-Am's customers.

121. Because a significant increase in rates may well affect demand, Phase 3 of this proceeding will be the appropriate forum to consider elasticity of demand and various protections that must be put into place.

122. While capital costs, annual operating costs, and financing costs, as well as the number of acre-feet of water purchased, must all be considered in calculating the unit cost of water, we are not persuaded that setting a very low per-acre foot cost cap will appropriately protect ratepayers.

123. Even the lowest-cost scenario developed jointly by the parties estimate a unit cost of $2,600 per acre-foot (excluding Cal-Am facilities, but including the cost of delivery to the Cal-Am receiving point); this scenario is based on a capital cost of $204.3 million (which assumes a project cost of $227 million and then deducts $22 million from MCWD buy-in fees) and is still $400 per acre-foot over the amount proposed by DRA.

124. The $297.5 million capital cost that we adopt today will yield a per-acre-foot cost of approximately $6,300 (excluding Cal-Am facilities), assuming that the Settling Parties can obtain the low-cost SRF financing that is planned.

125. Given these scenarios, we do not find that the per-acre-foot cost cap proposed by DRA is viable. If we were to adopt DRA's proposal, Cal-Am would soon be before us with a new application seeking relief and it is unlikely that the project could go forward in a timely way.

126. Cal-Am ratepayers should only be responsible for costs exceeding the cost cap ceiling if these costs are due to extraordinary circumstances. Requests

for recovery above the cost cap ceiling will be subject to a heighten level of scrutiny and review.

127. The Parties to the Water Purchase Agreement plan to finance all costs included in the project facility estimated costs, including initial capital costs, pre-effective date costs and expenses, preconstruction development, permitting fees and expenses, and pre-acceptance defense costs.

128. If there is not a less costly method of obtaining financing of any shortfall, the Water Purchase Agreement provides that Cal-Am or an affiliate will loan up to $17.5 million to the Public Agencies. In addition, Cal-Am or an affiliate will make available a credit line of $8 million to manage short-term financial liquidity needs of the Public Agencies.

129. The Water Purchase Agreement provides that to the extent the costs of the loan or credit line provided by Cal-Am are not recovered in the price of the Product Water, the principal and interest shall be recoverable in rates, i.e. the Public Agencies will repay the loans, but the costs of such repayment will be passed onto Cal-Am's ratepayers.

130. Because the Water Purchase Agreement is structured such that Cal-Am essentially commits future cash flows to funding the debt committed to the Regional Project, it is possible that the Water Purchase Agreement may be considered either a capital lease or a take-or-pay contract by its external auditors and that rating agencies may impute debt and consider such leveraging in their analysis and rating of Cal-Am.

131. While DRA does not object to the use of least-cost financing, DRA is concerned that any advantages that the Public Agencies may obtain by accessing lower cost financing tools may be eroded by a premature assertion that the Commission will guarantee Cal-Am's financial viability.

132. The low-cost financing opportunities that the Public Agencies may be able to access are at the core of the benefits of the Regional Project.

133. Based on the Unified Financing Model the parties jointly developed, Exhibit 113 considers the impact of a single issuance of private activity bonds, issuance of tranches of private activity bonds, and the interaction of such bonds with SRF loans and federal grants.

134. It is premature to weigh in on the debt equivalence issue at this time; because we must balance the needs of ratepayers and shareholders, we will consider the issue of debt equivalency when we can develop a full record, as we believe the Settling Parties have acknowledged.

135. We find that no modifications are required with regard to the debt equivalency issue. When Cal-Am files the appropriate pleading, we will address the debt equivalency issue in detail.

136. As contemplated by the Settling Parties and set forth in Section 6 of the Water Purchase Agreement, the Advisory Committee would consist of a representative of Cal-Am, MCWD, and MCWRA, each of whom would have full decision-making authority because they are defined as Parties under the Water Purchase Agreement.

137. The WPA also provides for a "Municipal Advisor" to serve on the Advisory Committee. Under the WPA, the Municipal Advisor will be two representatives appointed by the Cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside.

138. The Municipal Advisor is an advisory role and will have not decision-making authority for purposes of the WPA.

139. Consensus would be sought, but to the extent that differences could not be resolved, the participants on the Advisory Committee have the right to seek dispute resolution by a neutral third-party.

140. The purpose of the Advisory Committee is to provide a formal means for the parties to coordinate the design, permitting requirements, construction, operations, maintenance, repairs, and replacement of the various components of the Regional Project, in consultation with the selected project manger.

141. Providing the Monterey Peninsula Cities with a meaningful advisory role on the Advisory Committee provides adequate ratepayer protection.

142. There is no need for duplicative roles. Elected Peninsula City officials will coordinate on the appointment of the Municipal Advisor and there is some overlap of governance between the Monterey Peninsula Water Management District and the Monterey County Board of Supervisors.

143. The Settling Parties have stated their willingness to provide regular, detailed status reports to the Commission and these should be provided on a quarterly basis to the Executive Director and the Director of the, DWA and a copy should be provided to the Director of DRA.

144. Cal-Am has agreed to meet quarterly with DRA and DWA staff should be included in these meetings. Detailed information should be provided as to progress on the Regional Project, particularly with regard to financing plans, construction bids, and permitting, as is contemplated in the Water Purchase Agreement.

145. Transparency is essential; therefore, there is no reason that information provided in these reports and meetings should be confidential unless there is a particular and specific reason for requesting confidentiality.

146. Based on the Settling Parties' agreement to have Cal-Am provide a copy of the detailed quarterly status reports to DRA and because we are directing Cal-Am to meet with DRA and DWA on a quarterly basis, we are satisfied with the status report arrangements.

147. A major component of the Settlement Agreement and the Water Purchase Agreement is the provision that the Settling Parties will maximize the intake of seawater on a cost-effective basis in a way that ensures compliance with the requirements of the Agency Act.

148. Because a relatively small amount of source water is expected to be pumped from the Salinas Valley Groundwater Basin, that water cannot be exported from the Salinas Valley.

149. Maximizing the seawater content assists as a proxy for determining whether source water is seawater or groundwater, based on salinity or Total Dissolved Solids, but we must also consider the volume of groundwater in the basin.

150. Because of seawater intrusion, according to the FEIR, we can assume that the salinity of the seawater and the salinity of the brackish groundwater are approximately equal.

151. The water to be desalinated is water which has a TDS concentration high enough to make it unsuitable for human consumption or agricultural use unless it is treated. This is the brackish source water, which will be produced by new wells to be owned by the Monterey County Water Resources Agency.

152. The Monterey County Water Resources Agency is charged with taking the necessary steps to both comply with the Agency Act and to deliver brackish source water to the desalination plant sufficient to produce up to 10 of desalinated water.

153. The 10-mgd plant will be operated to produce 10,500 afy of desalinated water, which would then provide 8,800 afy to Cal-Am and up to 1,700 afy to Marina Coast Water District.

154. Marina Coast Water District requires 2,700 afy from Phase 1 of the Regional Project. The permanent allocation of 1700 AFY to MCWD from the desalination plant would be supplemented with the 1,000 afy of recycled water provided to Marina Coast Water District by the Regional Urban Water Augmentation Project.

155. The 10 mgd-capacity plant could provide Cal-Am's peak needs of 10,900 afy in a drought year, and still meet the simultaneous Marina Coast Water District demand of 1,700 afy, when that permanent allocation is required, because Marina Coast Water District could rely on its groundwater well pumping capacity to meet its own peak needs.

156. The desalination plant could produce up to 11,200 afy assuming operation at full capacity.

157. The calculations of the amounts of product water that are estimated to be delivered to Cal-Am and to MCWD are based on groundwater and hydrologic modeling, and parties recognize that some variance will occur.

158. Based on modeling, Settling Parties have determined that the Marina Coast Water District "agreed allocation" will be calculated by multiplying the amount of desalinated water produced by the desalination plant during a calendar year by the average percentage of the amount of Salinas Basin Water included in the Brackish Source Water.

159. For each calendar year, Marina Coast Water District's annual allocation of the desalinated water shall be the greater of either the "agreed allocation" or the permanently allocated water.

160. For purposes of determining the Marina Coast Water District "agreed allocation" the average percentage of Salinas Basin water in the source water will be deemed not to exceed 15% during the first five years of operation of the Regional Project.

161. This averaging approach allows Cal-Am to receive an average of 8,800 afy of water from the desalination plant. The Settling Parties also recognize that Cal-Am requires additional water during peak periods and in critically dry years. After the first five years of operation, the calculation of annual allocations and agreed allocations will be derived according to the formulas in Exhibit E of the Water Purchase Agreement.

162. Permanently allocated product water refers to the quantity of water needed to satisfy Marina Coast Water District customers' demand that cannot be satisfied by potable groundwater limits. This term refers to the limits for the withdrawal of water from the Salinas Valley Groundwater Basin imposed on Marina Coast Water District for the development of the former Fort Ord. As provided for in Section 9.4(d) of the Water Purchase Agreement, Marina Coast Water District is required to notify Cal-Am when it requires permanently allocated product water.

163. Section 8.2(a) of the Water Purchase Agreement requires that at least one vertical test well and one slant well be drilled to obtain more precise data regarding the operation of the wells and the salinity of the water extracted from the wells.

164. If test well development reveals that Cal-Am will not be able to receive its full allocation of desalinated water, Monterey County Water Resources Agency must prepare a written report; parties are to meet and confer to develop a plan of action; and Cal-Am may seek additional Commission approval, to the extent that

expenditure of additional funds are required. If necessary, a contingency plan would be prepared by a mutually-acceptable engineer.

165. The Advisory Committee is to meet at least every quarter to review the prior quarter's quantity of pumped brackish source water, the average TDS and chloride concentrations, and the elevation of the Salinas Basin, and to discuss and recommend the current quarter's pumping and delivery of source water to ensure that both Cal-Am and Marina Coast Water District receive the proper allocations of desalinated water. The Advisory Committee will also meet quarterly to plan deliveries of product water that ensures that the allocations are fully met, recognizing Cal-Am's need for the full allocation of product water during its peak demand period.

166. The Settling Parties have recognized the need for accurate measurement of the volume of brackish source water deliveries from the wells to the desalination plant and of product water deliveries from the desalination plant to the Marina Coast Water District meter and the Cal-Am meter, and have spelled out details in the Water Purchase Agreement to ensure precise measurement of these quantities.

167. If feasible, DRA states that slant wells should be used because this technology could minimize the potential that Cal-Am won't receive the water its customers are paying for, could reduce costs associated with compliance with the Agency Act, and could avoid more costly energy costs associated with vertical well operation.

168. DRA and Monterey Peninsula Water Management District maintain that limiting the amount of groundwater that must remain in the basin subject the Regional Project to potential failure and risk of litigation.

169. There is little practical experience with slant wells, and drilling and operating both a vertical test well and a slant test well should provide important information.

170. We will not require the modification of the Settlement Agreement or the Water Purchase Agreement to require the use of slant wells, because we find that the test well approach that is carefully outlined in the Water Purchase Agreement is adequate.

171. Groundwater pumping for municipal and irrigation supply has led to a drop in groundwater levels and concomitant seawater intrusion.

172. Seawater has been migrating gradually into the Salinas Valley Groundwater Basin since the 1940s and was first documented by the Department of Water Resources in 1946.

173. Parties have elected to use salinity as a proxy for determining the amount of source water that is seawater and the amount of water that is groundwater, but we cannot consider the salinity calculation in isolation.

174. Parties have elected to use salinity as a proxy for determining the amount of source water that is seawater and the amount of water that is groundwater, but we cannot consider the salinity calculation in isolation. As described in the Water Purchase Agreement, and in order to comply with the Agency Act, the Monterey County Water Resources Agency will monitor levels of Total Dissolved Solids in the source water, by taking into account the salinity of the seawater, the salinity of the brackish water, and the amount of brackish water supplied from the brackish water source wells, in order to determine the average percentages of seawater and Salinas Basin water delivered to the plant as feed water.

175. Based on the analysis of hydrology and groundwater modeling in the FEIR, we are persuaded that the volume of water available for desalination and delivery to Cal-Am will not be diminished, although the water that originates from the Salinas Valley Groundwater Basin may well become purer, because pumping the wells (whether vertical or slant wells) will not only draw seawater towards the coast, but the saline-intruded groundwater will also be drawn towards the coast, which in essence reverses the seawater intrusion dynamic, and reduces the salinity of the groundwater portion of the intake supply but does not change the volume.

176. Based on the analysis of hydrology and groundwater modeling in the FEIR, we are persuaded that the volume of water will not be diminished, although the water that remains in the Salinas Valley Groundwater Basin may well become purer, because pumping the wells (whether vertical or slant wells) will not only draw seawater towards the coast, but the saline-intruded groundwater will also be drawn towards the coast, which in essence reverses the seawater intrusion dynamic and reduces the salinity of the groundwater portion of the intake supply.

177. The existing Castroville Seawater Intrusion Project also reduces demand on groundwater and will help to stabilize groundwater pumping.

178. The Castroville Seawater Intrusion Project distributes recycled water through the Salinas Valley Recycling Project to agricultural users in the northern Salinas Valley Groundwater Basin and also helps to alleviate groundwater extraction in those areas.

179. The Salinas Valley Water Project (which consists of modifying the Nacimiento Dam spillway and reoperating the storage and release schedules of the Nacimiento and San Antonio reservoirs) and the Salinas River Diversion

Facility will direct Salinas River water for delivery to Castroville Seawater Intrusion Project customers to replace the current use of groundwater that is delivered with the recycled water. The Salinas River Diversion Facility became operational in 2010. All of these projects and redistribution of water resources help to provide a form of "in-lieu" groundwater recharge, according to the FEIR analysis.

180. We are satisfied that the volume of water retained in the Salinas Valley Groundwater Basin will be adequate to ensure that Cal-Am receives its full water allocation, even if vertical wells are ultimately determined to be the best source water technology.

181. We see no reason to modify the language in the Water Purchase Agreement that describes the test well approach and we see no reason to require the use of slant wells – an admittedly more expensive and untested technology – at this time.

182. We are satisfied that Settling Parties will ensure that a Water Contingency Plan is developed, to the extent that both slant wells and vertical wells prove to be infeasible.

183. Because of the Municipal Advisor, and because of the status reports we require, and because of the community outreach that is built into the Settlement Agreement and the Water Purchase Agreement, the Settling Parties are –as they should be – fully accountable to develop the source wells. If the Monterey County Water Resources Agency determines that this is not feasible for some reason, we will be duly informed. Based on the requirements of the Cease and Desist Order, we have no doubt that Cal-Am will petition for additional relief, if the Regional Project appears to be infeasible.

184. The parties estimate total annual O&M costs at $12.9 million, while DRA estimates that the annual costs will be $14.270 million (based on a start date of 2015).

185. The parties will have a greater understanding of the O&M costs as the desalination plant is permitted and constructed.

186. If Cal-Am elects not to take its full allocation of water, MCWD would have the right of first refusal of that water, but would pay full price for that excess water, pursuant to the WPA.

187. Although DRA objects to Cal-Am ratepayers funding the costs of a partial second pass reverse osmosis technology, it is not unreasonable to exceed the current minimum legal requirements for this major infrastructure investment.

188. It is not clear that additional pilot plant testing would not provide additional information that cannot be ascertained from the test wells, and would add delay and expense to the process.

189. A 12-month pilot test was previously conducted for the Moss Landing project, as all parties have acknowledged, and we see no reason to delay this project any further, despite the potential differences in groundwater chemistry from the seawater that was tested at MLPP.

190. Given the sensitivity analysis in DRA's testimony, it is evident that a delay in the construction period will add to the costs of the project and we are not convinced that implementation costs will be correspondingly reduced.

191. Although we are not requiring specific changes to the Settlement Agreement or the Water Purchase Agreement regarding technical issues, given BOR's experience with desalination projects, it is reasonable that Settling Parties

consider their recommendations carefully, and address the recommendations in their quarterly status reports to the Commission.

192. The Cal-Am facilities consist of three large diameter conveyance pipelines (the Transfer Pipeline, the Seaside Pipeline, and the Monterey Pipeline, which also includes the Valley Greens Pump Station)two distribution storage reservoirs (the Terminal Reservoirs), and aquifer and storage recovery facilities.

193. After the permitting and design process, assuming there are no unexpected delays in the permitting of the Regional Project, actual construction of the Cal-Am facilities is anticipated to begin in late 2011 and would be completed by summer of 2014.

194. The estimated capital costs for the Cal-Am facilities range from $82.61 million to $118.75 million, with the most probable cost estimated at $95 million.

195. The Settling Parties recommend a capital cost cap of $106.875 million for Cal-Am facilities, while DRA proposes $8.4 million in cost reductions based on the most probable estimate of $95 million.

196. Based on the estimates before us, it is reasonable to adopt the Settling Parties' cost cap estimate for the Cal-Am facilities, in order to provide certainty for ratepayers and investors.

197. We do not agree that DRA's proposed reduction of $3.25 million to the aquifer storage and recovery facilities should be based on the Monterey Peninsula Water Management District's actual costs to establish the Phase 1 aquifer storage and recovery facilities, because of differences in wells and design criteria.

198. The Settling Parties and DRA appear to agree that contingencies will be adjusted as the Regional Project becomes more certain, which is standard practice and provided for in Sec. 6.4(j) of the Water Purchase Agreement.

199. Any status report provided to the Commission by Cal-Am should contain the most complete and updated information available, including the updated construction budget for the Regional Project, and revised and updated components and contingency factors..

200. No party raises significant objections to the Settlement Agreement's proposed approach to treating the Cal-Am facilities (other than the transfer pipeline) as used and useful as soon as they are constructed; while this approach is unusual, we see no reason to modify the Settlement Agreement.

201. Under the Water Purchase Agreement, the cost of the desalinated water will have two components: the debt service associated with financing the capitalized costs of the Public Agency-owned facilities (including design, permitting, construction, pre-effective date costs) and the costs of operating and maintaining the facilities.

202. Pursuant to the Settlement Agreement, we agree that the costs of the product water would be recovered through the Modified Cost Balancing Account – essentially a balancing account already established to record and recover in rates the costs of purchased water.

203. We must consider the rate applied to AFUDC in connection with the risks incurred by Cal-Am and the amount of time its funds will be used.

204. Because we are not altering the semi-annual approach to rate recovery for the Cal-Am facilities and because we have adopted a capital cost cap without requiring a reasonableness review, we find that Cal-Am has little risk of disallowance.

205. Cal-Am should only be compensated for its actual carrying costs.

206. The proposed AFUDC rates on the record do not reflect the current economic environment and would likely result in an over- or under-collection.

207. It is reasonable to adopt an initial AFUDC rate that is more representative of current rates, and allow this rate to be trued-up to reflect actual carrying costs.

208. It is reasonable to allow Cal-Am to file Tier 2 advice letters as proposed in the Water Purchase Agreement.

209. We agree with Cal-Am and the Settling Parties that it is reasonable to allow semi-annual advice letter filings and that a true-up process is reasonable. This approach will provide some certainty as to cash flow, and can be adjusted to the extent any costs are disallowed, as Cal-Am recognizes.

210. Cal-Am has agreed to proceed in the most cost-effective manner in constructing its own facilities, and to provide a summary of costs and detail the expenditures made in the prior quarter. Cal-Am should also file a progress report and timeline that provides a detailed report on the permitting, construction, budget, timeline and progress report on each component of the Cal-Am facilities.

211. DWA staff has the discretion to compare progress made on the Regional Project with the planned budget and to consider whether sufficient progress is being achieved on the Cal-Am facilities. Cal-Am should also provide workpapers that delineate the competitive procurement process, the contracting terms, project management goals, and milestones achieved for each aspect of the project. MCWD must provide detailed workpapers to demonstrate that all costs associated with its desalination plant project were reasonably incurred and are relevant to the Regional Project. These should be provided in the Status Reports.

212. Assuming that Cal-Am adheres to the Settling Parties' estimated capital cost cap, we will not require a backward-looking reasonableness review of these costs.

213. It is reasonable to require Cal-Am to update DRA and DWA staff on the design and refined cost estimates of the Cal-Am only facilities, because this approach will help to ensure that Cal-Am explains and justifies the project costs that are included in each Tier 3 advice letter. Cal-Am should meet with DRA and DWA on a quarterly basis.

214. The ratemaking approach we authorize today eliminates the need for the Special Request 2 Surcharge authorized in D.06-12-040.

215. No party disagrees that the Regional Project is the preferred project, and no party disagrees that the Public Agencies are required participants in the Regional Project.

216. We find that the Public Agencies' participation in the Regional Project is vital to the success of this project, and therefore, the pre-effective costs incurred to date, including the legal costs, should be recoverable.

217. The pre-effective date costs are included as a line item in the calculation of the most probable estimated cost included in Exhibit C to the Settlement Agreement, and are not expected to exceed $14 million., with approximately half of those costs incurred though year-end 2009.

218. While we cannot anticipate every contingency, we would be reluctant to authorize recovery of pre-effective date costs greater than $14 million. We will carefully review such requests if Cal-Am files an application for additional capital cost recovery and will expect thorough documentation and detailed workpapers to be provided. MCWD must provide detailed workpapers to demonstrate that all costs associated with its desalination plant project were

reasonably incurred and are relevant to the Regional Project. These should be provided in the Status Reports.

219. Cost allocation and rate design will be addressed in Phase 3 of this proceeding and will be coordinated with Cal-Am's next available GRC for the Monterey District.

Conclusions of Law

1. Cal-Am is a Water Corporation as defined in Pub. Util. Code § 241, and may not proceed with the Coastal Water Project, or an alternative, absent our certification that the present or future public convenience and necessity require this project.

2. We have considered how the widely-recognized need may best be met by various water supply alternatives, as evaluated according to the statutory framework established by Pub. Util. Code. § 1001 et seq.

3. As the basis for granting a CPCN, the Commission must consider the need for the project, community values, recreational and park areas, historical and aesthetic values, and the influence on the environment, as set forth in Pub. Util. Code § 1002(a).

4. The review process established by CEQA is the primary vehicle for the environmental review.

5. As determined in D.03-09-022, the Commission is the lead agency for CEQA review of the Coastal Water Project.

6. CEQA precludes the lead agency from approving a proposed project or project alternative unless that agency requires the project proponent to eliminate or substantially lessen all significant effects on the environment where feasible, and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations.

7. CEQA requires that, prior to approving the project or a project alternative, the lead agency must certify that the EIR was completed in compliance with CEQA, that it reviewed and considered the EIR prior to approving the project or a project alternative, and that the EIR reflects our independent judgment. (Pub. Res. Code § 21082.1(c)(3), CEQA Guidelines § 15090.) Here, the final EIR was certified by the Commission in D.09-12-017.

8. If the federal agencies were to prosecute Cal-Am for "takes," under the Endangered Species Act, enforcement actions could include further reduction of the water supply and heavy fines.

9. The Marina Coast Water District (MCWD) was organized in 1960 and operates in accordance with the County Water District Law (Water Code §§ 30000 *et seq.*). MCWD is governed by five directors elected at-large from within MCWD's jurisdictional boundaries.

10. The Monterey County Water Resources Agency (MCWRA) is a public agency, which was created by the Monterey County Water Resources Agency Act (Agency Act), as codified in Chapter 52 in the California Water Code Appendix.

11. Pursuant to the Agency Act, no groundwater from the Salinas Basin may be exported for use outside the basin, with limited exceptions for Fort Ord, and MCWRA may obtain an injunctive relief from the court prohibiting the exportation of such groundwater.

12. The Monterey County Board of Supervisors is ex officio the Board of Supervisors of MCWRA. The Board of Supervisors appoints a nine-member Board of Directors for MCWRA. Each of the five supervisors of Monterey County appoints one director and the other four are appointed by

majority vote of the supervisors from nominees submitted by various agricultural groups.

13. The Monterey Regional Water Pollution Control Agency (MRWPCA) is governed by a Board of Directors, consisting of a Monterey County Supervisor, a director of MCWD, mayors and city council members of various cities served by the Pollution Control Agency, and members of various sanitation districts.

14. The Monterey Peninsula Water Management District (MPWMD) was created in 1977 for purposes of managing and regulating the use, reuse, reclamation, conservation of water, and financing public works projects.

15. MPWMD is governed by a seven member board of directors. Five of the directors are elected directly, one member is an elected Monterey County Supervisor, and one member is a member, councilmember, or city manager appointed by the mayors of the six cities within the boundaries of the MPWMD: Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside.

16. In D.09-07-021, we have ordered Cal-Am to reduce leaks and to carefully account for previously-unaccounted for water and to explore the use of non-potable water to serve non-agriculture landscaping needs.

17. The timing associated with water supply constraints has become more critical with the issuance of the State Water Resources Control Board's (SWRCB) WR 2009-0060, its final Cease and Desist Order, issued on October 20, 2009.

18. SWRCB Order WR 2009-0060 requires Cal-Am to undertake additional measures to reduce its diversions from the Carmel River and to terminate all such diversions no later than December 31, 2016. A court order temporarily stayed the Cease and Desist Order, but the Superior Court of Santa Clara County lifted the stay on April 22, 2010.

19. Pursuant to Rule 13.9, which provides that "[o]fficial notice may be taken of such matters as may be judicially noticed by the courts of the State of California pursuant to Evidence Code section 450 et seq.," it is reasonable to grant Cal-Am's uncontested request for official notice of SWRCB Order WR 2009-0060 and the Superior Court's Order dissolving the stay.

20. Based on the mandatory cumulative annual reductions, the estimated operational yield from the ASR project, the estimated afy supplied by the Sand City desalination plant, and the estimated Coastal Water Project output, the Cease and Desist Order finds that the total amount diverted from the Carmel River must not exceed Cal-Am's water rights of 3,376 afy by the 2016-17 water year.

21. Because permitting and building the approved desalination plant and associated infrastructure will take a significant amount of time, it is reasonable to approve the Regional Project without delay in order to ensure that the required water supply is available to the Monterey Peninsula by the 2016-17 water year, as required by the SWRCB.

22. We concluded in D.09-12-017 that the FEIR for the Coastal Water Project complied with CEQA, and found that the FEIR is the competent and comprehensive informational tool that CEQA requires it to be.

23. Because we determined that the FEIR was completed in compliance with CEQA, that the FEIR has been presented to the Commissioners (the decision-making body of the Commission), and has been reviewed, considered, and applied prior to action on the project, and that the FEIR reflects the Commission's independent judgment and analysis, we certified the FEIR on December 17, 2009 in D.09-12-017.

24. The No-Project Alternative would not satisfy the requirements of Order 95-10, would not protect the Seaside Basin, would not result in a drought-proof water supply, and would not protect the listed species in the riparian and aquatic habitat below the San Clemente dam; therefore the No-Project Alternative is not a tenable option.

25. Because of the lengthy history of the Coastal Water Project, the FEIR alternatives analysis entailed consideration of many alternatives in the context of several different proposed projects and various related documents, including the New Los Padres Dam and Reservoir EIR (originally proposed by the Monterey Peninsula Water Management District in 1989 and defeated by voters in 1995), the Carmel River Dam and Reservoir Project (considered in A.97-03-052, precluded by AB 1182, and dismissed in D.03-09-022), and the Commission's Water Supply Contingency Plan Evaluation and Coastal Water Project EIR (prepared in response to AB 1182 and known colloquially as Plan B).

26. It is reasonable to require Cal-Am to implement the mitigation measures set forth in Appendix C as a condition of the approval of its participation in the Regional Project and as a condition for issuing the CPCN.

27. Pursuant to Rule 12.1(d), the Commission must ensure that a settlement is reasonable in light of the whole record, consistent with the law, and in the public interest.

28. According to the provisions of Monterey County Code Chapter 10.72.30(B), private ownership of a desalination plant is prohibited.

29. The Outfall Agreement commits sufficient capacity in the existing Monterey Regional Water Pollution Control Agency's outfall such that Marina Coast Water District can discharge the brine, but does not require approval by this Commission.

30. It is reasonable to set the capital cost cap at the highest estimated cost, including a 25% cost contingency factor, because this approach to capital cost recovery strikes a fair balance that will allow certainty in project financing and protection for Cal-Am ratepayers.

31. We do not agree with DRA's assertion that only a per-acre-foot cost cap will allow us to approve just and reasonable rates.

32. The Commission's determination that the costs associated with the Regional Desalination Project are just and reasonable is conditioned upon MCWD's and MCWRA's full compliance with the terms and conditions of the Settlement Agreement and the Water Purchase Agreement and with the current law and practices.

33. The infrastructure associated with the Regional Project is required to ensure that Cal-Am can continue to provide adequate water supplies and service to its customers, consistent with the requirements of Pub. Util. Code § 789.1(c).

34. In D.05-11-026 and D.05-12-040, the Commission's decisions considering the steam generator replacements for the Diablo Canyon and SONGS nuclear plants, respectively, the Commission adopted cost caps for these major infrastructure projects, determined that a reasonableness review would be conducted, to the extent that PG&E and SCE sought recovery of costs over the authorized cost cap, and also determined that there was an absolute ceiling beyond which the Commission would not authorize ratepayer recovery.

35. It is reasonable to require Cal-Am to file and serve the financing plan in this proceeding, once that plan is final.

36. The Commission must retain its authority to ensure that Cal-Am ratepayers are paying cost-based rates related to the Regional Project, and we must have the discretion to verify that these costs are appropriate, are

project-based, and do not include any costs that would otherwise be paid by the Public Agencies in the normal course of business. The Public Agencies have their own transparent processes and procedures. To the extent that these agencies, in exercising their duties to be accountable to their constituencies, find that particular aspects of the Regional Project are not reasonable and cost-effective, it is reasonable to require Cal-Am to bring this issue to the Commission for its review and consideration, by filing the appropriate pleading.

37. It is reasonable to approve the Advice Letter filing procedures proposed in the Water Purchase Agreement.

38. We intend to fully consider the debt equivalence issue when Cal-Am files an application addressing this issue; however, we are fully cognizant of the need for the investor-owned utilities we regulate to remain financially viable, as set forth with particularity in Pub. Util. Code § 727.5(e).

39. While the Commission must consider the Settlement Agreement as a whole, we must also ensure that the various provisions of the Settlement and the Water Purchase Agreement are in the public interest.

40. On balance, it is reasonable to add a Municipal Advisor to the Advisory Committee.

41. As Public Agencies, both the Marina Coast Water District and the Monterey County Water Resources Agency are subject to the requirements of the Brown Act (Government Code Sections 54950 et seq.) and the California Public Records Act (Government Code Sections 6250 et seq.).

42. We do not find that the Advisory Committee must be subject to these same requirements. The procedures we have adopted today, along with the procedures that the Public Agencies must adhere to, provide sufficient information for the public and adequate avenues for public participation.

43. Because the Marina Coast Water District is located within the Salinas Valley Groundwater Basin, it will take an annual allocation of desalinated water for distribution within its service territory; this approach allows the Regional Project to comply with the Agency Act.

44. Compliance with the Agency Act is within the Monterey County Water Resources Agency's jurisdiction and it is reasonable that this agency would determine the particular types of wells to drill based on analysis of the data and after consultation with the Marina Coast Water District and Cal-Am.

45. It is reasonable that the Monterey County Water Resources Agency would also determine whether the Marina Coast Water District's "agreed allocation" (i.e., up to 1,700 afy based on the assumption of an average of 15% groundwater in the brackish source water) can be delivered and still meet the requirements of the Agency Act. Given the importance of the water allocation issue, it is reasonable to require Cal-Am to submit a report after the first five-year period, and with every GRC filing thereafter, that provides updated information on the water supply obligations and deliveries addressed in Section 9 of the Water Purchase Agreement. Cal-Am must submit this report to DRA and DWA, and serve all parties in this proceeding.

46. For the Cal-Am facilities, it is reasonable to determine that, once constructed, the conveyance, pumping, and reservoir facilities will be designated as used and useful for ratemaking purposes, even if the Regional Project is delayed for some reason.

47. The transfer pipeline used to deliver desalinated water downstream from the delivery point to the Cal-Am facilities throughout its distribution system will not be deemed used and useful until the Regional Project is completed.

48. The Commission has continuing jurisdiction over Cal-Am to ensure that rates are just and reasonable.

49. Cal-Am should be required obtain authorization from the Commission before it may give its consent or approval of O&M costs under the Water Purchase Agreement.

50. We do not consider the Commission's ongoing oversight of Cal-Am to ensure just and reasonable rates to be a material change to the Water Purchase Agreement.

51. For an infrastructure project of this magnitude, the Commission must be apprised of the impact on rates and must have the ability to understand and monitor the costs involved; therefore, we will hold the Settling Parties accountable to the provisions outlined in the Settlement Agreement and the Water Purchase Agreement, as set forth in Section 4.3, Cost Management.

52. Because we adopt the Settling Parties' proposed cost cap of $106.875 million cost cap for the Cal-Am facilities, recovery of costs greater than $106.875 million will only be approved for ratepayer recovery upon a showing that these costs were the result of extraordinary circumstances and subject to a heightened level of scrutiny.

53. Any sale of excess product water should inure to the benefit of Cal-Am ratepayers, who are providing the vast majority of the funding for this Regional Project and should correspondingly benefit from any sales of the product water.

54. It is reasonable and consistent with the public interest that the Water Purchase Agreement requires use of a partial second-pass reverse osmosis technology in order to protecting public resources and the health and well-being of humans and plants.

55. We must consider overall feasibility of the project, including the Cal-Am facilities, in our assessment of the Regional Project. A project of this magnitude will require substantial time for permitting and review by local authorities. Given the exigencies of the Cease and Desist Order, it is not reasonable to place additional permitting constraints on the Cal-Am facilities.

56. While we do not assert jurisdiction over the Public Agencies, we must retain our non-delegable constitutional duty to ensure that the rates eventually established are just and reasonable.

57. It is reasonable to adopt an initial AFUDC rate of 4.00% to compensate Cal-Am for its carrying costs and allow for a true-up to reflect actual carrying costs. The Settlement Agreement should be so modified.

58. As we determined in D.07-08-031, effective regulatory oversight and the magnitude of this infrastructure investment deserves thoughtful consideration by the full Commission, as costs are rolled into rates.

59. The Special Request 2 Surcharge authorized in D.06-12-040 should be eliminated.

60. It is reasonable to require the Public Agencies to repay the portion of the pre-effective date costs that are addressed in the Reimbursement Agreement approved in D.10-08-008.

61. It is reasonable to find that the Settlement Agreement and Water Purchase Agreement are reasonable in light of the entire record, in compliance with the law, and in the public interest. We agree with the Settling Parties: time is of the essence to ensure that the Regional Project can be permitted, financed, and constructed.

62. The Settlement Agreement and the Water Purchase Agreement we approve today have far-reaching consequences. While we cannot bind future Commissions, we are guided by the Commission's findings in D.06-09-040.

63. Commission precedent establishes that we cannot bind the actions of future Commissions; however, we believe the settlement is a fair, just, and reasonable compromise of the many long-standing, difficult, and costly issues involved in solving the water supply constraints on the Monterey Peninsula and ensuring that the restrictive water reductions set forth in the State Water Resources Control Board Cease and Desist Order can be avoided if the Regional Project is built.

64. It is reasonable to state our intent that all future Commissions recognize and give full consideration and weight to the fact that this settlement and implementing agreements, as modified, have been approved based on the expectations and reasonable reliance of the parties and this Commission that all its terms and conditions will be implemented by future Commissions.

65. Because of the timing of the State Water Resources Control Board Cease and Desist Order, this decision should be effective today, in order to allow the Regional Project to be financed, permitted, and constructed as soon as practicable.

O R D E R

IT IS ORDERED that:

1. The Settlement Agreement and Implementing Agreements, filed on April 7, 2010, and updated by the Settling Parties on August 31, 2010, are approved.

2. Beginning January 15, 2011, California-American Water Company shall submit quarterly status reports on the permitting, financing, design, bidding, and

construction of the Regional Project to the Executive Director and to the Director of the. California-American Water Company shall meet quarterly with Division of Ratepayer Advocates and staff. No modification to the Settlement Agreement is required to effectuate this requirement. The Marina Coast Water Management District must provide detailed workpapers to demonstrate that all costs associated with its desalination plant project were reasonably incurred and are relevant to the Regional Project and shall provide these workpapers to California-American Water Company, which shall include them in the Status Reports.

3. To the extent that the Public Agencies, in exercising their duties to be transparent and accountable to their constituencies, find that particular aspects of the Regional Project are not reasonable and cost-effective, then California-American Water Company must bring this issue to the Commission for its review and consideration, by filing the appropriate pleading.

4. Within 60 days after the first five-year period of the Water Purchase Agreement, and with every General Rate Case filing thereafter, California-American Water Company shall submit a report that provides updated information on the water supply obligations and deliveries addressed in Section 9 of the Water Purchase Agreement. California-American Water Company must submit this report to Division of Ratepayer and Advocates and Division of Water and Audits, and serve all parties in this proceeding.

5. California-American Water Company shall submit regular filings as to the adequacy of the water received and any issues with respect to adequate ratepayer representation. These filings shall be served on the Director of the Division of Ratepayer and Advocates and the Director of the Division of Water and Audits, as well as all parties in this proceeding.

6. California-American Water Company shall file a Tier 2 Advice Letter seeking authorization to consent to O&M costs prior to giving its consent or approval under the Water Purchase Agreement. Rate recovery for any O&M expenditures will not be authorized absent prior Commission authorization.

7. We approve the Regional Project and issue a Certificate of Public Convenience and Necessity to California-American Water Company for the following components of the Regional Project: the Transfer Pipeline, the Seaside Pipeline, the Monterey Pipeline, including the Valley Greens pump station, the Terminal Reservoirs, and the Aquifer Storage and Recovery facilities, subject to California-American Water Company complying with all feasible mitigation measures identified in the Final Environmental Report and the Mitigation Monitoring and Reporting Program contained in Appendix C of this decision.

8. The Mitigation Monitoring and Reporting Program in Appendix C is adopted herein.

9. The California Environmental Quality Act Findings of Fact for the Regional Project in Appendix B accurately reflect the independent analysis contained in the Final Environmental Impact Report and are supported by substantial evidence in the administrative record, and are incorporated as findings herein.

10. We certify the Addendum to the Final Environmental Impact Report issued on March 24, 2010 and received into evidence on June 14, 2010.

11. The Special Request 2 Surcharge authorized in Decision 06-12-040 is no longer applicable.

12. Marina Coast Water District and the Monterey County Water Resources Agency shall repay to California-American Water Company the portion of the

pre-effective date costs included in the Reimbursement Agreement approved in Decision 10-08-008, as provided for in that Reimbursement Agreement.

13. Application 04-09-019 remains open to address other issues, including but not limited to cost allocation and rate design, intervenor compensation, and pending petitions for modification.

This order is effective today.

Dated December 2, 2010, at San Francisco, California.

MICHAEL R. PEEVEY
President
JOHN A. BOHN
TIMOTHY ALAN SIMON
NANCY E. RYAN
Commissioners

I reserve the right to file a dissent.

/s/ DIAN M. GRUENEICH
Commissioner

Appendix A
List of Acronyms

A	Application
AB	Assembly Bill
ADR	Alternative Dispute Resolution
AFUDC	Allowance for Funds Used During Construction
AFY of afy	Acre–feet per year
ALJ	Administrative Law Judge
ASR	Aquifer Storage and Recovery
BOR	Bureau of Reclamation
Cal-AM or CAW	California American Water Company
CEQA	California Environmental Quality Act
CPCN	Certificate of Public Convenience and Necessity
CSIP	Castroville Seaside Intrusion Project
CWP	Coastal Water Project
D	Decision
DEIR	Draft Environmental Impact Report
DRA	Division of Ratepayer Advocates
DWA	Division of Water and Audits
EIR	Environmental Impact Report
FEIR	Final Environmental Impact Report
MCWD	Marina Coast Water District
MCWRA	Monterey County Water Resources Agency
mg/L	Milligrams per Liter
mgd	Million gallons per day
MLPP	Moss Landing Power Plant
MPWMD	Monterey Peninsula Water Management District
MRWMD	Monterey Regional Waste Management District
MRWPCA	Monterey Regional Water Pollution Control Agency
NOAA	National Oceanic Atmospheric Administration
O&M	Operations and Maintenance
PAB	Private Activity Bonds
PEA	Proponent's Environmental Assessment
PG&E	Pacific Gas and Electric Company
PPHs	Public Participating Hearings
PM10	Particulate Matter greater than 10 Microns
Pub. Res. Code	Public Resource Code
Pub. Util. Code	Public Utilities Code

REPOG	Regional Plenary Oversight Group
RT	Reporters Transcript
RUWAP	Regional Urban Water Augmentation Project
SCE	Southern California Edison Company
SONGS	San Onofre Nuclear Generation Station
SRDF	Salinas River Diversion Facility
SRF	State Revolving Fund
SVRP	Salinas Valley Reclamation Plant
SVWP	Salinas Valley Water Project
SWRCB	State Water Resources Control Board
SWTP	Surface Water Treatment Plant
TDS	Total Dissolved Solids
USFWS	United States Fish and Wildlife Service
Water Purchase Agreement	Water Purchase Agreement

(END OF APPENDIX A)

APPENDIX B

CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

I. INTRODUCTION

This document contains the CEQA findings, as required by Public Resources Code Section 21081, to support the decision of the California Public Utilities Commission (CPUC) on the proposed regional desalination water facility and associated infrastructure (Regional Project), addressing each significant impact associated with the Regional Project, the feasibility of alternatives to the Regional Project and the myriad benefits of the Regional Project that support approval and outweigh any remaining environmental impacts.

The California-American Water Company (CalAm) has been ordered by the State Water Resources Control Board (SWRCB) to cease diverting more than its legal right to 3,376 acre feet of water per year (AFY) from the Carmel River on or before December 31, 2016. As a result, CalAm must secure replacement supplies of 8,498 AFY. In addition, in *California American Water v. City of Seaside et al.*, a case adjudicating water rights of various parties who use groundwater from the Seaside Basin, the Monterey County Superior Court Case issued a final decision requiring CalAm to find 2,975 AFY in replacement supplies that it currently draws from the Seaside Basin. To provide replacement water supplies, CalAm applied to the CPUC for a Certificate of Public Convenience and Necessity (CPCN) for a desalination water facility known as the Coastal Water Project (CWP). In general, the CWP consists of several basic elements: a desalination plant, a water intake mechanism, a brine outfall mechanism, desalinated water conveyance and storage infrastructure and aquifer storage and recovery.

CalAm originally proposed to implement the CWP through construction and operation of a desalination plant co-located with the Moss Landing Power Plant, and the Final Environmental Impact Report (FEIR) prepared by the CPUC fully examined this option as the Moss Landing Alternative. The FEIR also analyzed the option of a CalAm owned and operated desalination plant at the North Marina location, denoted the North Marina Alternative.

The preferred project now under consideration is a public-private partnership identified as the Regional Project and includes a new desalination facility capable of producing up to 10 million gallons per day (mgd) of desalinated water to be located on the North Marina site. Construction of the regional desalination facility is scheduled to begin in late 2011 and would be completed by the summer of 2014. The Regional Project described in the FEIR consists not only of the regional desalination plant and all associated infrastructure, but also other water supply projects approved by other agencies, some of which are currently in the process of being constructed. This overall group of regional water supply projects (including the regional desalination components) is referred to herein as the "Phase 1 Regional Project," while the regional desalination plant and associated facilities is referred to merely as the "Regional Project." In addition to the proposed desalination plant, the Phase 1 Regional Project includes previously analyzed and permitted water supply projects that will be undertaken whether or not the CWP is implemented. These projects include the Sand City desalination plant, the Regional Urban Water Augmentation Project (RUWAP), two existing aquifer storage and recovery wells, as well as potential demand offset of up to 1,000 AFY from conservation. The various components of the Phase 1 Regional Project would, taken together, provide replacement water supply of 15,200 AFY: 12,500 AFY to CalAm customers and 2,700 AFY of water supply to the Marina Coast Water District (MCWD). As noted above, other components of the Phase 1 Regional Project have already been approved by other agencies and some are in the process of being constructed. Thus, the only portions of the Phase 1 Regional Project that the CPUC is considering, and that are therefore addressed by these Findings, are the proposed regional desalination plant and associated infrastructure (i.e., intake, pipelines, aquifer storage and recovery facilities, reservoirs, transmission mains and use of an existing outfall).

As to the proposed desalination plant, the Monterey County Water Resources Agency (MCWRA) would own, construct, operate and maintain the six vertical source water wells and raw water conveyance facilities to a centralized location where the source water would then be delivered to the desalination plant. MCWD would own, construct, operate, and maintain the portion of the raw water conveyance facilities from the centralized location to the desalination plant, the desalination plant itself and the product water conveyance facilities to the delivery point, which then becomes CalAm's intake point. CalAm would own, construct, operate, and maintain the pipeline, conveyance, and pumping facilities necessary to deliver water to its customers.

Specifically, CalAm seeks a CPCN from the CPUC for the following aspects of the Regional Project: Transmission Main South, Terminal Reservoir, the Aquifer Storage and Recovery (ASR) Facilities and the Monterey Pipeline, including the Valley Greens Pump Station. The Monterey Regional Water Pollution Control Authority (MRWPCA) would own, operate, and maintain the outfall for the return of the brine to the sea. The parties have filed a motion with the Commission to approve a Settlement Agreement providing for the development, construction and operation of the Regional Project. The portions of the Regional Project proposed to be constructed, owned and operated by CalAm are hereinafter referred to as the "CalAm Facilities." The portions of the Regional Project proposed to be constructed, owned and operated by other agencies are hereinafter referred to as the "Non-CalAm Facilities."

In 1996, CalAm proposed the Carmel River Dam and Reservoir Project (CRDRP) as a means to comply with the SWRCB order to cease unlawful diversions from the Carmel River. In response, the Legislature passed Assembly Bill (AB) 1182, requiring the CPUC, in consultation with CalAm, the State Department of Water Resources, and other affected interests, to conduct a long-term contingency plan describing the program or combination of programs that CalAm would pursue if the CRDRP were not to proceed. The plan was completed in 2002 and concluded that a combination of desalination and aquifer storage and recovery could produce the estimated replacement water supply needs of CalAm. In 2003, the CPUC issued a decision that dismissed CalAm's CRDRP application, ordered CalAm to file a new application for the CWP and determined that the CPUC would be the lead agency for environmental review of the CWP under the California Environmental Quality Act (CEQA). CalAm submitted an application for the Moss Landing Alternative, and preparation of the FEIR began. A regional project concept was described in the Notice of Preparation for the FEIR and was discussed at the scoping meetings for the FEIR. The Regional Project currently described in the FEIR evolved as a result of continued stakeholder participation and input. Thus, the notion of a regionally-focused project entailing participation from multiple other public entities was envisioned at the outset of the CEQA process and the CPUC, as lead agency for the FEIR, assisted in sponsoring development of the Regional Project. Since the CPUC is approving a settlement agreement and related Water Purchase Agreement that governs all of the Regional Project and will later act under its rate-making authority on the entire Regional Project, the CPUC is the public agency with the greatest responsibility for supervising or approving the project as a whole pursuant to CEQA Guidelines Section 15051(b). Thus, the CPUC has

always been, and remains, the appropriate lead agency for the FEIR. Furthermore, no interested party challenged either the 2003 decision declaring the CPUC to be the lead agency or the 2009 CPUC decision certifying the FEIR in its lead agency capacity.

In accordance with CEQA, the CPUC prepared and published a Draft Environmental Impact Report (DEIR) analyzing the potential environmental impacts of the CWP. The DEIR analyzed at an equal project-level of detail the following three alternative scenarios for implementing the CWP: the Moss Landing Alternative, the North Marina Alternative, and the Phase I Regional Project. The CPUC received and responded to comments received on the DEIR. On December 17, 2009, the CPUC certified the FEIR for the CWP. References herein to the FEIR includes the DEIR, revised to reflect the comments received on the DEIR, as well as the comments and the responses to the comments themselves, and the March 2010 Addendum to the FEIR, which addresses errata in the text of the FEIR and includes responses to comment letters that had inadvertently been omitted from the FEIR. The FEIR concludes that most of the environmental impacts of the Regional Project can be reduced to a less than significant level through the implementation of specified mitigation measures. Although certain of the Regional Project's impacts related to construction air quality and operation-related greenhouse gas (greenhouse gas) emissions could potentially be reduced to a less than significant level through the implementation of specific mitigation measures, the FEIR conservatively concludes that these impacts would be significant and unavoidable because they would require implementation and cooperation by other agencies not under the CPUC's jurisdiction or control and due to feasibility concerns further enumerated below.

With this background in mind, the CPUC makes the following findings concerning the significant environmental impacts of the Regional Project, the feasibility of alternatives to the Regional Project and the statement of benefits of the Regional Project that outweigh its significant unavoidable environmental impacts.

II. FINDINGS CONCERNING SIGNIFICANT ENVIRONMENTAL EFFECTS

The FEIR identified the following potential impacts on the environment as significant. Except for certain impacts described below related to construction air quality and operational greenhouse gas emissions, the implementation of

appropriate mitigation measures will reduce the potential impacts of the Regional Project to a less than significant level. The Findings address all significant impacts identified by the FEIR, including both impacts that can be mitigated to a less than significant level and impacts that cannot be and thus are significant and unavoidable. The CPUC finds that all other impacts would be less than significant in accordance with the conclusions of the FEIR.

In the case of the CalAm Facilities, the applicable and feasible mitigation measures described below have been imposed by the CPUC as conditions of approval on the Regional Project. In the case of Non-CalAm Facilities, the applicable and feasible mitigation measures described below can and should be (and in most cases, already have been) imposed as conditions of approval by MCWD, MCWRA and/or MRWPCA on the Regional Project. To make the mitigation measures specific to the Regional Project, minor revisions have been made to the text of certain mitigation measures imposed by the CPUC, described herein and set forth in full in the Mitigation Monitoring and Reporting Program (MMRP), as compared to the text of those measures in the FEIR.

As to the CalAm Facilities, the CPUC finds that changes or alterations have been required in, or incorporated into, the Regional Project which avoid or substantially lessen most of the significant environmental effects identified in the FEIR. As to the Non-CalAm Facilities, the CPUC finds that such changes or alterations are within the responsibility and jurisdiction of other public agencies and not the CPUC and that such changes have been, or can and should be, adopted by such other agencies. The CPUC further finds that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives that are not required in, or incorporated into, the Regional Project.

As described below, after implementation of all feasible mitigation measures, the Regional Project will have a significant unavoidable impact in the area of construction air quality (both at a project level and cumulatively) and operational greenhouse gas emissions.

A. Surface Water Resources

1. Impact 6.1-1: Project construction activities would cause erosion and increase stormwater runoff resulting in an adverse water quality impact.

a. Impact. Construction of the Intake Facilities would involve drilling a series of wells into the seawater intruded portion of the 180-foot Aquifer and also would involve earthmoving activities such as excavation, grading, soil stockpiling, and backfilling. The construction activities would generate loose, erodible soils that, if not properly managed, could be washed into surface water by rain or by water used during grading operations. Soil erosion could cause excess sediment loads and affect the water quality of any nearby ditch or water body. Construction activities would involve use of fuel and other chemicals that, if not managed properly, could be washed off into the stormwater, resulting in a significant water quality impact.

b. Mitigation. In accordance with Mitigation Measure 4.1-1, the project sponsors are subject to the SWRCB General Construction Permit requirements, which require development and implementation of a monitoring program. The program will require the contractor to conduct inspections of the construction site prior to anticipated storm events and after actual storm events. During extended storm events, the inspections will be conducted after every 24 hours. The inspections will be conducted to identify areas contributing to stormwater discharge, to evaluate whether measures to reduce pollutant loadings identified in the Stormwater Pollution Prevention Plan (SWPPP) are adequate and properly installed and functioning in accordance with the General Construction Permit, and to determine whether additional control practices or corrective maintenance activities are needed.

c. Findings. Implementation of Mitigation Measure 4.1-1 will reduce Impact 6.1-1 to a less than significant level. The CPUC has imposed Mitigation Measure 4.1-1 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.1-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non Cal-Am Facilities and has already been imposed by MCWD and MCWRA on the Non Cal-Am Facilities under those agencies' jurisdiction.

2. Impact 6.1-2: Excavation during construction could require dewatering of shallow groundwater. The water discharge, if contaminated, could adversely affect surface water.

a. Impact. Excavation during project construction may intercept shallow or perched groundwater, requiring temporary localized dewatering to facilitate construction. Groundwater encountered during excavation would be pumped and discharged to the local drainage system. Water from dewatering operations could contain materials used during typical construction activities such as silt, fuel, grease or other chemicals. The discharge from construction dewatering could thus contaminate downstream surface water. This could be a significant impact, however it would be localized and temporary. The discharge would be subject to the National Pollutant Discharge Elimination System (NPDES) permit requirements.

b. Mitigation. Mitigation Measure 4.1-2 requires project sponsors to notify the Regional Water Quality Control Board (RWQCB) prior to discharge of extracted groundwater and provide the results of required water quality tests

performed. It also requires project sponsors to conduct treatment of the extracted groundwater as required under the applicable permit issued by the RWQCB (e.g., waiver, site-specific permit or permit for low threat discharges).

c. Findings. Implementation of Mitigation Measure 4.1-2 will reduce Impact 6.1-2 to a less than significant level. The CPUC has imposed Mitigation Measure 4.1-2 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.1-2 can and should be imposed by other agencies with jurisdiction on the pertinent Non Cal-Am Facilities and has already been imposed by MCWD and MCWRA on the Non Cal-Am Facilities under those agencies' jurisdiction.

3. Impact 6.1-4: The project discharge associated with the proposed Regional Desalination Facility could adversely affect water quality in Monterey Bay.

a. Impact. The project discharge from the proposed desalination facility, including any wastewater generated from the Surface Water Treatment Plant, could affect the water quality in Monterey Bay at varying degrees depending upon the parameter of concern. The analysis includes potential impacts related to salinity, temperature, treatment chemicals, potential contaminants in source water, and dissolved oxygen content of the project discharge. The potential impacts due to elevated salinity, temperature, treatment chemical and source water contaminants would be less than significant. The project discharge would reduce the dissolved oxygen levels in Monterey Bay by approximately 3.11 percent to 4.41 percent at the maximum estimated source-

water dissolved oxygen concentration of 2.0 milligrams/liter (mg/L). Even with a dissolved oxygen concentration of 0.5 mg/L in the source water, the decrease in dissolved oxygen in the diluted discharge would be approximately 5.19 percent and 5.51 percent for ambient concentrations in Monterey Bay of 4.25 mg/L and 8.00 mg/L. The percentage decrease in dissolved oxygen would be less than 10 percent for all scenarios. The ambient dissolved oxygen concentration in Monterey Bay, near the MRWPCA outfall, may be as low as 4.5 mg/L. The Basin Plan for the RWQCB states that the dissolved oxygen concentration in Monterey Bay shall not be reduced below 5.0 mg/L at any time. Consequently, when ambient dissolved oxygen is less than or equal to 5.0 mg/L, any decrease in dissolved oxygen could be significant.

b. Mitigation. In accordance with Mitigation Measure 4.1-4c, the project sponsor shall develop and implement an aeration system capable of providing dissolved oxygen in the discharge of 5.0 mg/L or higher. The CPUC shall review the aeration system prior to implementation.

c. Findings. Implementation of Mitigation Measure 4.1-4c will reduce Impact 6.1-4 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that Mitigation Measure 4.1-4c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD on the regional desalination facility.

B. Groundwater Resources

1. Impact 6.2-1: Components of the Regional Project may violate water quality standards or waste discharge requirements.

a. Impact. The construction and development of ASR injection/extraction wells and/or desalination water supply wells may cause short-term changes in groundwater quality or violate waste discharge requirements. Well drilling and construction could degrade groundwater quality while discharge of well development water to the ground surface or waters of the State, such as local streams or the Pacific Ocean, could degrade receiving water quality by introducing foreign matter, increasing turbidity, or altering water chemistry beyond Basin Plan limits. The discharge of development water would vary in duration, water quality and volume depending on the type of well (ASR or vertical, or angled extraction well). Degradation of groundwater and/or surface water through the process of well drilling and development would be considered a significant impact.

b. Mitigation. Per Mitigation Measure 4.2-1, prior to pumping development water from all groundwater wells constructed as part of the project, the project sponsor shall consult with RWQCB to determine the appropriate discharge permitting for the well development discharge. The permitting requirements will differ depending on the duration of the discharge, the quality of the water to be discharged, and the discharge location. Based on RWQCB consultation, the proper Application/Report of Waste Discharge shall be prepared for the waste discharge requirements or NPDES Permit. If a

Report of Waste Discharge is required, it shall include, at a minimum, a characterization of the discharge water, estimates of discharge rates and volumes, characterization of the discharge area and determination of the potential impact to groundwater, soils, surface water, runoff, and flooding.

c. Findings. Implementation of Mitigation Measure 4.2-1 will reduce Impact 6.2-1 to a less than significant level. The CPUC has imposed Mitigation Measure 4.2-1 on the pertinent CalAm Facilities as a condition of approval of the CPCN. The CPUC finds that Mitigation Measure 4.2-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWRA on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

C. Marine Biological Resources

1. Impact 6.3-1: The project discharge from the Regional desalination facility could result in degradation of marine habitat and species.

a. Impact. This impact relates to the reduction in dissolved oxygen levels in Monterey Bay as a result of the project discharge. See, Impact 6.1-4.

b. Mitigation. Implement Mitigation Measure 4.1-4c. In accordance with this measure, the project sponsor shall develop and implement an aeration system capable of providing dissolved oxygen in the discharge of 5.0 mg/L or higher.

c. Findings. Implementation of Mitigation Measure 4.1-4c will reduce Impact 6.3-1 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that

Mitigation Measure 4.1-4c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

D. Biological Resources

1. Impact 6.4-1: Construction and operation of the new facilities associated with the Regional Project may adversely affect species identified as rare, threatened, endangered, candidate, sensitive or other special status by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

a. Impact. Construction of the subsurface intakes and pipelines could affect species identified as rare, threatened, endangered, candidate, sensitive, or other special status by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS). Trenching and other soil disturbance has the potential to cause direct mortality of special status plants and their seed accumulated in the soil. Special status animals could be killed by vehicles and equipment, their burrows or other retreats could be crushed, or they could be killed if they fall into trenches or pits and cannot escape. Trenching and other surface-disturbing activity could dry out streams, wetlands or seasonal ponds in which aquatic animals live, or pools in which the larval stages of amphibians are developing. Sediment or other pollutants could cause mortality to aquatic animals in streams at and below the construction areas.

b. Mitigation. Per Mitigation Measure 4.4-1, the project proponent shall carry out the following measures (either directly or through provisions

incorporated into the contract specifications for the Regional Project) for those facilities and pipeline reaches identified as potentially supporting special-status species.

(i) Mitigation Measure 4.4-1a: *Avoid harm or harassment of special-status invertebrates (Smith's Blue Butterfly).* Smith's blue butterflies could occur in several portions of the project area where their host plant occurs, including near the sourcewater intake facilities adjacent to coastal dunes. Focused surveys for Host Buckwheat Plants shall be conducted by a qualified biologist before responsible agencies charged with regulating and permitting for species. Maps depicting the results of these surveys shall be prepared. Construction of project elements will be planned to avoid mapped habitat for Smith's blue butterfly. If impacts to host plants are unavoidable, surveys shall be conducted to determine if Smith's blue butterflies are present, following USFWS's guidelines. If no butterflies are found, no further mitigation is required. If Smith's blue butterflies are found, consultation will be required with the USFWS to determine the necessary level of compensatory mitigation. Compensatory mitigation may include removal and safe relocation of host plants.

(ii) Mitigation Measure 4.4-1c: *Avoid harm or harassment of California red-legged frogs, California tiger salamanders, and Santa Cruz long-toed salamanders.* These species could occur in aquatic habitats in the project area, including the desalination plant site, sourcewater intake facilities and return flow pipelines. Construction in and around aquatic habitats could result in direct take of individuals (e.g., being crushed by heavy machinery) and loss of habitat by changing composition. To determine whether any special-status aquatic species would be affected by any given project element, surveys shall be conducted at the specific project site (following standard USFWS protocol in the case of red-legged frogs and salamanders). If it is determined that any of these federally listed species is present, formal consultation with the USFWS would be necessary. Construction of project elements shall be planned to avoid habitat for special status aquatic species such as the California red-legged frog. If construction will occur adjacent to potential habitat, impacts would be avoided or minimized as follows:

- Prior to any construction activities, the boundaries of construction areas will be clearly delineated with orange plastic construction fencing to prevent workers or equipment from inadvertently straying

from the construction area. All construction personnel, equipment, and vehicle movement shall be confined to designated construction areas and connecting roadways. Movement of construction and personal vehicles shall be prohibited outside designated construction areas or off established roadways.

- Prior to the onset of any ground-disturbing activities, exclusion fencing will be established around areas of potentially occupied habitat, as determined by a qualified biologist. Exclusion fencing shall consist of silt-fencing or similar material at least 36 inches in height that is buried at least six inches in the ground to prevent incursion under the fence. This fence shall be surveyed each morning before construction to verify that no frogs or other special status aquatic species have entered the construction site.
- Before any construction activities begin, a biologist approved by the USFWS shall conduct a training session with construction personnel to describe the red-legged frog and its habitat, the specific measures being implemented to minimize effects on the species, and the boundaries of the construction area.
- All food-related trash items shall be enclosed in sealed containers and removed daily from the project site to discourage the concentration of potential predators in habitat potentially occupied by California red-legged frogs.

(iii) Mitigation Measure 4.4-1d: *Avoid direct mortality and/or disturbance of special-status plant populations*. Floristic surveys of all suitable habitat for special status plants shall be conducted prior to the permitting phase of the project. Maps depicting the results of these surveys shall be prepared for use in final siting design. Sensitive plant species are widespread and could occur at various sites associated with the different project components.

Project facilities shall be sited to avoid impacts on special status plants and their required habitat constituent elements, when reasonably feasible.

Unavoidable impacts on listed plant species require formal consultation with the USFWS and the CDFG. Impacts on non-listed species would likely involve informal consultation.

Special-status plant occurrences located within temporary construction areas shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limits areas. Seasonal avoidance measures (i.e., limited operating periods based on timing of annual plant dormancy), combined with topsoil salvage and site restoration, may be acceptable in some cases. Compensation for permanent loss of special-status plant occurrences, in the form of land purchase or restoration, must be provided to the level acceptable to the resource agencies.

Compensatory measures will be determined on a case-by-case basis by the lead agency in consultation with the USFWS and the CDFG. Compensation for loss of special-status plant populations typically involves the purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or off-site. In the latter case, a Site Restoration Plan shall be required to be prepared by the applicant and approved by USFWS and/or CDFG, as appropriate. It shall include the following:

(1) The location of areas to restore lost plant populations;

(2) A description of propagation and planting techniques to be employed in the restoration effort; plants to be impacted shall have their seeds collected so that the seeds can be planted within the restoration areas;

(3) A time table for implementation of the restoration plan, including pilot-phase studies;

(4) A monitoring plan and performance criteria (Performance criteria may vary across sites and species, but is intended to provide proof of restoration success. This is normally a majority of the plants surviving a minimum of five years.);

(5) A description of remedial measures to be performed if initial restoration measures are

unsuccessful in meeting the performance criteria; and,

(6) A description of the site maintenance activities to follow restoration activities; these may include weed control, irrigation, and control of herbivory by livestock and wildlife. Site maintenance activities shall be altered or intensified when necessary to meet performance criteria.

(iv) Mitigation Measure 4.4-1e: *Avoid Construction Impacts on Burrowing Owls*. Burrowing owl habitat may occur at the following project locations: Regional Project Desalination Plant, Transmission Main South, Regional Project Sourcewater Pipelines, and ASR Facilities. Preconstruction surveys for burrowing owls shall be completed in potential habitat in conformance with CDFG protocols, and no more than thirty days prior to the start of construction. If no burrowing owls are located during these surveys, no additional action would be warranted. However, if breeding or resident owls are located on or immediately adjacent to the site, a 250-foot buffer, within which no new activity is permissible, shall be maintained between project activities and nesting burrowing owls. This protected area shall remain in effect until August 31 or, at the discretion of the CDFG and based upon monitoring evidence, until the young owls are foraging independently. If construction will directly impact occupied burrows, eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction. No burrowing owls shall be evicted from burrows during the nesting season (February 1 through August 31).

(v) Mitigation Measure 4.4-1f: *Avoid Construction Impacts on Other Special-Status Birds.* Special status birds typically nest in California between March 1 and September 1. If construction-related work is scheduled outside of this nesting season, nesting birds will not be impacted and no mitigation is necessary.

If construction must occur during the breeding season (March 1 to September 1), a qualified ornithologist shall conduct preconstruction surveys no more than fifteen days prior to the initiation of disturbance wherever suitable habitat occurs for special-status birds. If active nests are found to be present within or adjacent to work sites during the breeding season, a construction-free buffer around the active nests shall be established. For raptors, this buffer is

typically 250 feet; for other birds it may be as narrow as 20 feet. An ornithologist in consultation with the CDFG shall determine the width of the buffer. This buffer shall be maintained until nesting has been completed and the young have fledged.

c. Findings. Implementation of Mitigation Measures 4.4-1a, 4.4-1c, 4.4-1d, 4.4-1e and 4.4-1f will reduce Impact 6.4-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.4-1d through 4.4-1f on the pertinent portions of the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.4-1a, 4.4-1c, 4.4-1d, 4.4-1e and 4.4-1f can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and, to the extent applicable, these measures have already been imposed by MCWD and MCWRA on the pertinent Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.4-2: Construction and operation of the new facilities associated with the Regional Project may adversely affect riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

a. Impact. Construction of the subsurface intakes and pipelines could affect sensitive natural communities. Sensitive habitats, including maritime chapparal, central dune scrub, coast live oak woodland, riparian woodland and scrub, salt marsh, and northern brackish marsh, are well distributed in the project area and comprise most of the areas with natural vegetation except for non-native grassland. They would be at risk of temporary and permanent impacts during the construction or long-term operation of the project.

b. Mitigation. Mitigation Measure 4.4-2b requires the avoidance of construction impacts on Sensitive Upland Habitats. Sensitive Upland Habitat, predominantly Central Maritime Chaparral, has been identified at the following project locations: ASR Facilities and Terminal Reservoir and Transmission Main South. Construction activities, facilities, and conveyance systems shall be sited in a manner that avoids upland habitats to the maximum extent feasible. Sensitive upland habitats shall be preserved where possible through facility siting within degraded or non-native vegetation. Sensitive areas shall be flagged for avoidance to minimize the possibility of inadvertent encroachment during construction. Construction staff shall be educated on the sensitive habitats located within and adjacent to the project's footprint, and a biological monitor shall be present to ensure compliance with off-limits areas.

When avoidance is not feasible during construction activities, sensitive upland habitats temporarily disturbed during construction activities shall be quantified and appropriate restoration strategies shall be set forth in a Habitat Restoration Plan, which shall be developed in consultation with the USFWS and the CDFG and submitted to the CPUC and the resource agencies. The Plan shall include the following elements: specific location of restoration site, details on soil preparation, seed collection, planting, maintenance, monitoring, and quantitative success criteria. At minimum, temporarily disturbed areas shall be restored by the project applicant to the natural (preconstruction) conditions, which may include the following actions: salvage and stockpiling of topsoil from maritime chaparral, central dune scrub, and oak woodland; regrading of disturbed sites with salvaged topsoil; and revegetation with native, locally collected species.

When restoration is not feasible (i.e., the impact is permanent), the project applicant shall purchase and/or preserve similar undisturbed habitat off-site, or restore nearby disturbed areas at a ratio to be determined by the USFWS, CDFG, and other responsible resource agencies with jurisdiction over the project area.

c. Findings. Implementation of Mitigation Measure 4.4-2b will reduce Impact 6.4-2 to a less than significant level. The CPUC has imposed Mitigation Measure 4.4-2b on the pertinent CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.4-2b can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

3. **Impact 6.4-3: Construction and operation of the new facilities associated with the Regional Project may adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act.**

   a. Impact. Construction of the subsurface intakes and pipelines could affect wetlands.

   b. Mitigation. Per Mitigation Measure 4.4-3, the Applicant shall implement the following measures for those facilities sited on or adjacent to wetlands. The project shall avoid areas of potentially jurisdictional wetland habitats to the maximum extent feasible through project siting and construction avoidance. The project shall implement Best Management Practices during construction to minimize impacts associated with erosion and sediment deposition into wetland and aquatic habitats. Temporary disturbance and/or permanent loss of wetlands or other waters of the U.S. require permits from both the U.S. Army Corps of Engineers (USACE) and (for areas within the Coastal Zone) the California Coastal Commission (CCC) as well as the RWQCB.

A wetland delineation per the USACE Wetland Delineation Manual, and using the one- parameter approach in areas within the Coastal Zone, shall be conducted prior to construction.

A delineation report shall be prepared and submitted to the USACE and CCC for verification, and to the CPUC for its approval. Through this process, final calculations of wetland area present in the project area would be obtained from responsible agencies charged with regulating and permitting for species. In addition, plans for proposed alteration to any watercourse shall be submitted to the CDFG for review.

The wetland habitat that would be lost under any given project element shall be functionally replaced as part of the Mitigation and Monitoring Plan required for permit issuance by the responsible agencies charged with regulating and permitting for species. The Mitigation and Monitoring Plan and

any relevant permit document or implementation plans will be submitted for review and approval to the relevant responsible agencies. In-kind and on-site replacement of lost wetland habitats must be done where possible. If multiple impacts on wetlands occur from the construction of facilities, larger wetland mitigation areas shall be created that provide greater functions and values than numerous small mitigation sites. The determination of wetland impacts and the subsequent location and design of potential mitigation sites shall be determined by qualified biologists in coordination with resource agency personnel. Mitigation and Monitoring Plans shall require the following of the project sponsor:

(1) Replacement of lost acreage and functions of wetland habitat;

(2) Identification of the restoration opportunities, complete with an analysis of the technical approach to create high quality wetlands;

(3) Prior to construction of any project element that may impact wetland habitats, obtaining any necessary permits from the USACE, RWQCB or the CCC;

(4) Preparation of detailed plans for wetland mitigation construction that include excavation elevations, location of hydrologic connections, planting plans, and soil amendments, if necessary; preparation of maintenance and monitoring plans in consultation with a qualified habitat restoration specialist; monitoring of any mitigation wetlands for a period of 5 years, during which the site will achieve the target jurisdictional acreage by Year 5; and determination of specific performance criteria and monitoring for site success; provision of annual monitoring reports to the appropriate resource agencies.

c. Findings. Implementation of Mitigation Measure 4.4-3 will reduce Impact 6.4-3 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that Mitigation Measure 4.4-3 can and should be

imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWRA on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

4. Impact 6.4-5: Construction and operation of the new facilities associated with the Regional Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

a. Impact. For many Regional Project elements, tree removal may be required during construction, either for the elements themselves or as part of access needs.

b. Mitigation. Per Mitigation Measure 4.4-5, a comprehensive survey shall be performed to identify, measure, and map trees subject to County tree removal ordinances (oak trees greater than 6 inches in diameter) and North County Area Plan and Carmel Valley Master Plan ordinances (all native trees greater than 6 inches in diameter), as well as landmark trees. Prior to the removal of protected trees, the project sponsor shall obtain tree removal permits or approvals for lost native and landmark trees and arrange mitigation with appropriate resource agencies. The standards for tree replacement shall be stipulated in the tree permits reviewed and approved by the pertinent local agencies.

c. Findings. Implementation of Mitigation Measure 4.4-5 will reduce Impact 6.4-5 to a less than significant level. The CPUC has imposed Mitigation Measure 4.4-5 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.4-5 can and should be imposed by other agencies with jurisdiction on the pertinent Non-

CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

E. Geology, Soils and Seismicity

1. Impact 6.5-1: Large earthquakes would be expected to damage the proposed facilities, impairing and/or disrupting their intended operations if not engineered to withstand such ground shaking.

a. Impact. The potential exists for large magnitude earthquakes to result in high intensity ground shaking. Intense ground shaking and high ground acceleration would affect the entire Regional Project area. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking. Intense ground shaking and high ground accelerations would affect the entire area around the proposed facilities and associated pipelines. The primary and secondary effects of ground shaking could damage structural foundations, distort pipelines and other water conveyance structures, and cause failure of concrete. Damage to these features would cause temporary service disruption and possibly loss of water due to leakage and pipe rupture. Pumps could be rendered inoperable. The most severe impacts of this type would result from liquefaction of the soil, which could induce both vertical and lateral displacement of the soil that would bend, weaken and break conveyance structures and structural foundations. Broken pipelines could result in soil washout and sinkholes. However, modern standard engineering and construction practices include design criteria to mitigate potential damage from an earthquake, and any potential interruption of service would likely be temporary in nature. While these practices would not completely

eliminate the potential for damage to the facilities, they would ensure that the resultant improvements will have the structural fortitude to withstand anticipated groundshaking without significant damage.

b. Mitigation. Per Mitigation Measure 4.5-1, a California licensed geotechnical engineer or engineering geologist will conduct geotechnical investigations of all project facilities and pipeline alignments prior to the final design and prepare recommendations applicable to foundation design, earthwork, backfill and site preparation prior to or during the project design phase. The investigations will specify seismic and geologic hazards including potential ground movements and co-seismic effects (including liquefaction). The recommendations of the geotechnical engineer will be incorporated into the design and specifications in accordance with California Geological Survey Special Publication 117 and shall be implemented by the construction contractor. The construction manager will conduct inspections and certify that all design criteria have been met in accordance with the California Building Code as well as applicable City and County ordinances.

c. Findings. Implementation of Mitigation Measure 4.5-1 will reduce Impact 6.5-1 to a less than significant level. The CPUC has imposed Mitigation Measure 4.5-1 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.5-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.5-2: Proposed pipelines and facilities could incur damage as a result of underlying soil properties (subsidence, high shrink-swell potential, and corrosivity).

a. Impact. The potential exists for facilities and pipelines to incur damage as a result of underlying soil properties. The soil types vary along the proposed pipeline routes and at the proposed facility sites. In general, throughout the project study area, there are soils that likely possess characteristics that could limit development of building structures or other facilities. These limitations include compressibility, shrink-swell capability (expansive behavior) and corrosivity. One or more of these soil properties could adversely affect portions of the proposed project.

Unless properly mitigated, shrink-swell soils could exert additional pressures on buried pipelines, producing shrinkage cracks that allow water infiltration and compromise the integrity of backfill material. Depending on the depth of the buried pipeline, soil in expansion or contraction could lead to undue lateral pipeline stress and stress of structural joints. Lateral stresses could, over time, lead to pipeline rupture or leaks in the coupling joints. Shrinkage cracks could form in native soils adjacent to the pipeline trench or in backfill material if expansive soils are used. If shrinkage cracks extend to sufficient depths, groundwater can infiltrate into the trench, causing piping (progressive erosion of soil particles along flow paths) or settlement failure of the backfill materials. Settlement failure can also occur if expansive soils are used in backfill and undergo continued expansion and contraction. Over time these soils could settle, resulting in misalignment or damage to buried pipelines.

The effects of shrink-well soils could damage foundations of aboveground structures, paved service roads, and concrete slabs. Surface structures with foundations constructed in expansive soils would experience expansion and contraction depending on the season and the amount of surface water infiltration. The expansion and contraction could exert enough pressure on the structures to result in cracking, settlement, and uplift.

The conductivity of soils may be high enough in the project area to corrode underground metal pipes and electrical conduits. Over time, pipe

corrosion could lead to pipeline failure, resulting in localized surface flooding of water or localized settlement of surface soils in the location of the failure. Failed subsurface electrical conduits could result in electrical short-circuiting. This would temporarily reduce power to the facility and possibly result in temporary shutdown of operations.

b. Mitigation. Per Mitigation Measure 4.5-2, all project elements and pipeline facilities will comply with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of expansive soils, and corrosivity. Appropriate geotechnical studies will be conducted by California licensed geotechnical engineers or engineering geologists using generally accepted and appropriate engineering techniques for determining the susceptibility of the sites to unstable, weak or corrosive soils in accordance with the most recent version of the California Building Code. A licensed geotechnical engineer or engineering geologist will prepare recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations will address mitigation of site-specific, adverse soil and bedrock conditions that could hinder development. Project engineers will implement the recommendations and incorporate them into project specifications. Geotechnical design and design criteria will comply with the most recent version of the California Building Code (CBC) and applicable local construction and grading ordinances. Once appropriately designed and subsequently constructed, in accordance with local and state building code requirements, the resultant improvements will have the structural fortitude to withstand the potential hazards of expansive soils or corrosivity without significant damage.

c. Findings. Implementation of Mitigation Measure 4.5-2 will reduce Impact 6.5-2 to a less than significant level. The CPUC has imposed Mitigation Measure 4.5-2 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.5-2 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

3. Impact 6.5-4: Potential injury and/or damage resulting from earthquake-induced landslide.

a. Impact. The majority of the Regional Project components are located in low lying coastal dune, Salinas River Valley, and rolling inland hill areas with a low susceptibility to earthquake-induced landsliding. Proposed components in the southern portion of the proposed project area are located on variable topography that includes the relatively flat bottom of Canyon del Rey, gently sloping terraces near Ragsdale Drive, and the steep slopes and narrow canyons in the mountainous areas. The proposed southern alignment of project pipelines and facilities crosses areas mapped as moderately to highly susceptible to earthquake-induced landsliding. The facilities susceptible to earthquake-induced landsliding include Transmission Main South, Terminal Reservoir and ASR Facilities.

b. Mitigation. Per Mitigation Measure 4.5-4, during the design phase for all project components that require ground-breaking activities, the project sponsor will perform site-specific design-level geotechnical evaluations which will include slope stability conditions and provide recommendations to reduce and eliminate any

potential slope hazards in the final design and if necessary, throughout construction. For all pipelines located in landslide hazard areas, appropriate piping material with the ability to deform without rupture (e.g., ductile steel) will be used. For all other facilities, a geotechnical evaluation will be conducted and the geotechnical evaluations will include detailed slope stability evaluations, which could include a review of aerial photographs, field reconnaissance, soil testing, and slope stability modeling. Facilities design and construction will incorporate the slope stability recommendations contained in the geotechnical analysis conducted by California licensed geotechnical engineers or engineering geologists. Final slope stabilization measures, determined by the licensed geotechnical engineers or engineering geologists in accordance with CBC requirements, may include, without limitation, one or more of the following:

- Appropriate slope inclination (not steeper than 2 horizontal to 1 vertical)
- Slope terracing
- Fill compaction
- Soil reinforcement
- Surface and subsurface drainage facilities
- Engineered retaining walls
- Buttresses
- Erosion control measures

Slope stabilization measures included in the geotechnical report will be incorporated into the project construction specifications and become part of the project.

c. Findings. Implementation of Mitigation Measure 4.5-4 will reduce Impact 6.5-4 to a less than significant level. The CPUC has imposed Mitigation Measure 4.5-4 on the pertinent CalAm

Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.5-4 can and should be imposed by other agencies with jurisdiction on the Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

4. **Impact 6.5-5: Potential facility damage resulting from a major earthquake in areas susceptible to liquefaction.**

   a. Impact. Figure 4.5-2 of the FEIR identifies potential liquefaction hazards associated with project sites evaluated at a project-level of detail. The designations (High, Moderate, Low and Variable) are based on liquefaction susceptibility analysis presented in the County of Monterey General Plan. Project elements that are located in areas assigned Moderate or High designations are assumed to be within a zone susceptible to liquefaction and thus could result in a potentially significant impact to liquefaction. These areas include the following: Monterey Pipeline, Intake Facility and Source Water Pipeline.

   b. Mitigation. Implement Mitigation Measures 4.5-1. Mitigation Measure 4.5-1 requires that a licensed engineer or geologist investigate all project facilities and pipeline alignments prior to the final design and prepare recommendations applicable to foundation design, earthwork, backfill and site preparation, which shall be incorporated into the project design and specifications and implemented by the construction contractor.

   c. Findings. Implementation of Mitigation Measure 4.5-1 will reduce Impact 6.5-5 to a less than significant level. The CPUC has imposed Mitigation Measure 4.5-1 on the CalAm Facilities

as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.5-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

F. Hazards and Hazardous Materials

1. Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials that may be present in excavated soil or groundwater.

a. Impact. All of the components of the Regional Project involve excavation, trenching, tunneling or grading for the construction of water conveyance pipelines, building footings and utilities. Properties with soil and/or groundwater contamination located on or within ¼ mile of project facilities have the potential to have impacted subsurface conditions at project locations. The typical contaminants anticipated are related to releases from gasoline service stations, dry cleaners, and agricultural uses such as petroleum hydrocarbons, volatile organic compounds, metals and pesticides. Of particular concern, construction of ASR facilities and installation of pipelines through the former Fort Ord Military facility could result in exposure to various organic substances, metals, petroleum products, and unexploded ordnance. Soil disturbance during construction could further disperse existing contamination into the environment and expose construction workers or the public to contaminants. If significant levels of hazardous materials are present in excavated soils, health and safety risks to workers and the public could occur. As to the proposed

desalination facility, the proposed seawater subsurface intake locations and sourcewater pipeline alignment would be located in an undeveloped coastal dune area. Construction of these elements could encounter hazardous materials in the soil and/or groundwater.

b. Mitigation. Per Mitigation Measure 4.6-1, the following measures shall be implemented in connection with project activities.

(i) Mitigation Measure 4.6-1a. Within one year prior to construction of facilities requiring excavation of more than 50 cubic yards of soil, the contractor shall retain a qualified environmental professional to conduct a Phase I Environmental Site Assessment in conformance with ASTM Standard 1527-05 to evaluate subsurface conditions that could be expected during construction. For all pipeline alignments, including Transmission Main South and the Monterey Pipeline, the contractor shall retain a qualified environmental professional to update the environmental database review to identify environmental cases, permitted hazardous materials uses, and spill sites within one-quarter mile of the pipeline alignment. Regulatory agency files will be reviewed for those sites that could potentially affect soil and groundwater quality within the project alignment.

If these preliminary environmental reviews indicate that a release of hazardous materials could have affected soil or groundwater quality at a project site, the contractor shall retain a qualified environmental professional to conduct a Phase II environmental site assessment to evaluate the presence and extent of contamination at the site, in conformance with state and local guidelines and regulations. If the results of the subsurface investigation(s) indicate the presence of hazardous materials, additional site remediation may be required by the applicable state or local regulatory agencies, and the contractors shall be required to comply with all regulatory requirements for facility design or site remediation.

(ii) Mitigation Measure 4.6-1b. Based on the findings of the analyses required by Mitigation Measure 4.6-1a, a project-specific Health and Safety Plan (HSP) shall be prepared in accordance with 29 CFR 1910 to protect construction workers and the public during all excavation, grading and construction services. The HSP shall identify the following, but not be limited to:

- A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals;
- Specified personal protective equipment and decontamination procedures, if needed;
- Safety procedures to be followed in the event suspected hazardous materials are encountered;
- Emergency procedures, including route to the nearest hospital;
- The identification of a site health and safety officer and responsibilities of the site health and safety officer.

(iii) Mitigation Measure 4.6-1c. The contractor shall have a site health and safety supervisor fully trained pursuant to the HAZWOPER standard (29 CFR 1910.120) be present during excavation, grading, trenching, or cut and fill operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage containers. The site health and safety supervisor must be capable of evaluating whether hazardous materials encountered constitute an incidental release of a hazardous substance or an emergency spill. The site health and safety supervisor shall direct procedures to be followed in the event that a hazardous materials release with the potential to impact worker health and safety is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, notifying Monterey County Health Department, Environmental Health Division, and retaining a qualified environmental firm to perform sampling and remediation.

(iv) Mitigation Measure 4.6-1d. The applicant and its contractor shall coordinate with each property owner at the time of construction and obtain a legal Right of Entry. The contractor shall comply with all provisions established in that agreement and all regulations regarding excavation, digging, and development within the former Fort Ord.

(v) Mitigation Measure 4.6-1e. A materials disposal plan shall be developed, specifying how all excavated material will be removed, handled, transported, and disposed of in a safe, appropriate, and lawful manner. The plan must identify the disposal method for soil and the approved disposal site,

and written documentation that the disposal site will accept the waste. This plan shall be submitted to the CPUC for review and approval.

A groundwater dewatering control and disposal plan shall be developed specifying how groundwater impacted by hazardous substances will be removed, handled, and disposed of in a safe, appropriate, and lawful manner. The plan must identify the locations at which potential groundwater impacts are likely to be encountered, the method to analyze groundwater for hazardous materials, and the appropriate treatment and/or disposal methods. This plan shall be submitted to the CPUC for review and approval.

c. Findings. Implementation of Mitigation Measures 4.6-1a through 4.6-1e will reduce Impact 6.6-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.6-1a through 4.6-1e on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.6-1a through 4.6-1e can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

G. Traffic

1. Impact 6.7-1: Short-term increases in vehicle trips by construction workers and construction vehicles on area roadways.

a. Impact. The implications of concurrent construction pertains to the potential for construction-generated traffic for more than one project component to use the same road(s). That is, the total number of vehicle trips added to the common route(s) due to concurrent construction of multiple project components would be collectively higher than the maximum number of daily and hourly vehicle trips associated with each individual project component. The level of

increased traffic generated by the collective/concurrent project construction in the central project area (e.g., a frequency of trucks as often as three every two minutes if all trucks used the same road or every three to five minutes if trucks were dispersed on roads) would be significant if all trucks used the same road and less than significant if trucks were dispersed on roads. The level of increased traffic generated by the collective/concurrent project construction in the southern project area (e.g., a frequency of trucks as often as three every two minutes if all trucks used the same road or as often as 1.5 minutes if trucks were dispersed on roads) would be significant.

b. Mitigation. Per Mitigation Measure 4.7-1, the contractor(s) will obtain, and comply with any conditions in, any necessary road encroachment permits prior to construction of each project component. As part of the road encroachment permit process, the contractor(s) will prepare a Traffic Control and Safety Assurance Plan (for work in the public right-of-way) in accordance with professional engineering standards and obtain approval of the plan from the agencies with jurisdiction over the affected roads. The plan will be developed on the basis of detailed project design plans and will include, at a minimum, the following:

- Develop circulation and detour plans to minimize impacts to traffic circulation.
- Control and monitor construction vehicle movements through the enforcement of standard construction specifications by periodic onsite inspections.
- Install traffic control devices where traffic conditions warrant, as specified in applicable jurisdiction's standards.

- Schedule truck trips outside of peak AM and PM peak commute hours to the extent feasible, and as needed to avoid adverse impacts on traffic flow. The frequency of truck trips (loaded or empty) shall be no greater than one every two minutes during the peak AM and PM peak commute hours.
- Post advanced warning signs of construction activities to allow motorists to select alternative routes.
- Arrange a telephone number with knowledgeable personnel to address public questions and complaints during project construction.
- Store all equipment and materials in designated contractor staging areas on or close to the worksite, in such a manner to minimize obstruction to traffic.

c. Findings. Implementation of Mitigation Measure 4.7-1 will reduce Impact 6.7-1 to a less than significant level. The CPUC has imposed Mitigation Measure 4.7-1 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.7-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.7-2: Reduction in the number of, or the available width of, travel lanes on roads where pipeline construction would occur, resulting in short-term traffic delays for vehicles traveling past the construction zones.

a. Impact. The Regional Project would include installation of new pipelines in both unpaved areas and paved roadways. Impacts from construction within road pavement would include direct disruption of traffic flows and street operations, due to lane blockages or street closures. Pipeline installation within and/or

across high-traffic volume arterials could have a significant adverse impact on traffic flow and operations at these locations. Traffic would be delayed as its travels past the construction zone, and the impacts would be considered significant, on all except low-volume local roads because congestion and resulting delays would be increased to a level unacceptable to the average motorist. Delays would also be experienced by drivers during off-peak hours, but because of the lower volume, fewer people would be affected by the delays during those periods.

b. Mitigation. Implement Mitigation Measure 4.7-1. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as result of construction activities. In addition, in accordance with Mitigation Measure 4.7-2, the following elements shall be included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1:

- Where possible, limit the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone.
- If alternate one-way traffic flow cannot be maintained past the construction zone, install detour signs on alternative routes around the closed road segment.
- Publish notices of the location(s) and timing of road closures in local newspapers, and on available web sites, to allow motorists to select alternative routes.
- Limit lane closures during peak hours to the extent possible.
- Restore roads and streets to normal operation by covering trenches with steel plates outside of

allowed working hours or when work is not in progress.

c. Findings. Implementation of Mitigation Measures 4.7-1 and 4.7-2 will reduce Impact 6.7-2 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-1 and 4.7-2 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.7-1 and 4.7-2 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

3. Impact 6.7-3: Demand for parking spaces to accommodate construction worker vehicles

a. Impact. The proposed project would create a temporary parking demand for construction workers and construction vehicles as crews move along the project corridor as pipes are installed, and during work on stationary facility locations (e.g., desalination plant, water storage tanks, pump stations, wells and reservoirs). For the stationary facility locations, the worksites would generally have sufficient onsite space to accommodate a demand for up to about 88 parking spaces (assuming all personnel drive alone to each day's work location) and the impact would be less than significant. Using the same travel mode assumption, each crew installing pipeline would require up to about 85 parking spaces. Given the proposed rate of construction during pipeline installation, impacts to parking would be relatively brief at any one location throughout the project area, but could reduce the parking capacity for people currently using the displaced spaces, creating a potentially significant

impact tied to the extra driving required as the displaced parkers look for alternative parking spaces.

b. Mitigation. Implement Mitigation 4.7.1. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as result of construction activities. In addition, per Mitigation Measure 4.7-3, the Traffic Control and Safety Assurance Plan will identify locations for sufficient construction parking.

c. Findings. Implementation of Mitigation Measures 4.7-1 and 4.7-3 will reduce Impact 6.7-3 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-1 and 4.7-3 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.7-1 and 4.7-3 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

4. Impact 6.7-4: Potential traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways.

a. Impact. Heavy equipment operating adjacent to or within a road right-of-way could increase the risk of accidents. Construction-generated trucks on project corridor roadways would interact with other vehicles. Conflicts would also occur between construction traffic and bicyclists and pedestrians resulting from pipeline construction and operation of construction equipment where crossings of a bikeway or pedestrian path occur. Numerous other designated bike routes occur

along roadways within the County, some of which support a designated bike lane.

b. Mitigation. Implement Mitigation Measure 4.7-1. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as result of construction activities. In addition, in accordance with Mitigation Measure 4.7-4, the following elements shall be included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1:

- Comply with roadside safety protocols to reduce the risk of accidents. Provide "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. Construction personnel shall be trained to apply appropriate safety measures as described in the plan.
- To the extent feasible, perform construction that crosses on-street and off-street bikeways (and sidewalks and pathways for pedestrians) in a manner that allows for safe access for bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.

c. Findings. Implementation of Mitigation Measures 4.7-1 and 4.7-4 will reduce Impact 6.7-4 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-1 and 4.7-4 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.7-1 and 4.7-4 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by

MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

5. **Impact 6.7-5: Access disruption to adjacent land uses and streets for both general traffic and emergency vehicles.**

a. Impact. The Regional Project would include installation of new pipelines in both unpaved areas and paved roadways, and access to driveways and to cross streets along the construction route within road pavement could be temporarily blocked due to trenching and paving. This could be an inconvenience to some and a significant problem for others, particularly schools and emergency service providers (e.g. police and fire).

b. Mitigation. Implement Mitigation Measure 4.7-1. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as a result of construction activities. In addition, per Mitigation Measure 4.7-5, the following elements shall be included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1:

- Maintain access for emergency vehicles at all times. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. Provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways.
- Provide flaggers in school areas at the start and end of the school day if and when pipeline installation would occur at designated school zones.

- Maintain access for private driveways to the maximum extent feasible.

c. Findings. Implementation of Mitigation Measures 4.7-1 and 4.7-5 will reduce Impact 6.7-5 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-1 and 4.7-5 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.7-1 and 4.7-5 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

6. Impact 6.7-6: Disruptions to transit and railroad service on pipeline alignment routes.

a. Impact. As discussed above, construction of the Regional Project would have temporary and intermittent effects on traffic flow, which could result in delays for Monterey-Salinas Transit bus service in the vicinity of the worksites. While buses could be slowed by project construction roads used as haul routes, a greater potential effect would occur on roads in which pipeline installation is proposed. Bus routes might need to be temporarily detoured and/or bus stops temporary relocated on the following roads: La Salle Avenue (Del Monte Boulevard to Flores Street), Yosemite Street (La Salle Avenue to Broadway) and General Jim Moore Boulevard (Broadway to South Boundary Road).

b. Mitigation. Implement Mitigation Measure 4.7-1. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as result of

construction activities. In addition, per Mitigation Measure 4.7-6, the following elements shall be included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1:

- Coordinate with Monterey-Salinas Transit so the transit provider can temporarily relocate bus routes or bus stops in work zones as it deems necessary.
- Provide advance notification to Union Pacific Railroad of the timing, location, and duration of construction activities that could affect the movement of trains on the tracks between Dolan Road and SR 156.

c. Findings. Implementation of Mitigation Measures 4.7-1 and 4.7-6 will reduce Impact 6.7-6 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-1 and 4.7-6 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.7-1 and 4.7-6 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

7. Impact 6.7-7: Increased wear-and-tear on the designated haul routes used by construction workers.

a. Impact. The use of trucks to transport equipment and material to and from the project work sites could affect road conditions on the designated haul routes by increasing the rate of road wear. The degree to which this impact would occur depends on the roadway design (pavement type and thickness) and the existing condition of the road. Freeways and major arterials are designed to handle a mix of vehicle types, including heavy

trucks. The project's impacts are expected to be negligible on such roads. However, rural roadways and residential streets may not have been constructed to support the weight and use by construction equipment.

b. Mitigation. In accordance with Mitigation Measure 4.7-7, the applicant and the affected jurisdiction(s) shall enter into an agreement, prior to construction of project components, that will detail the pre-construction conditions for all routes that will be used by project-related vehicles, and the post-construction requirements of the rehabilitation program. Roads damaged by project construction will be repaired to a structural condition equal to that which existed prior to construction activity.

c. Findings. Implementation of Mitigation Measure 4.7-7 will reduce Impact 6.7-7 to a less than significant level. The CPUC has imposed Mitigation Measures 4.7-7 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.7-7 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

H. Air Quality

1. Impact 6.8-1: Regional Project construction activities would generate emissions of criteria pollutants, including fugitive dust and equipment exhaust particulate matter.

a. Impact. Construction activities associated with the Regional Project would require the use of construction and earth moving equipment. Exhaust pollutants would be emitted during construction activities from motor-driven

construction equipment, construction vehicles and workers' vehicles, and fugitive dust would be generated by ground disturbing activities as well as from truck travel on paved and unpaved roads. It is estimated that emissions associated with construction of the Regional Project would be similar to the emissions shown in FEIR Table 4.8-8 (North Marina Project- Construction Emissions) for off-road (e.g., tractors, graders, backhoes, etc.) and on-road (e.g., light duty trucks, haul trucks, etc.) exhaust sources as well as for all sources of fugitive dust (e.g., dust entrainment from travel on unpaved roads and earth moving activities such as grading and excavation). Estimated construction emissions of PM10 are approximately 597 pounds per day, which would exceed the Monterey Bay Unified Air Pollution Control District's (MPUAPCD) significance threshold of 82 pounds per day of PM10, resulting in a significant impact.

b. Mitigation. The following measures shall be implemented in connection with construction activities associated with the Regional Project:

(i) Mitigation Measure 4.8-1a: Construction Fugitive Dust Control Plan. Project sponsor(s) shall require its construction contractor(s) to implement a dust control plan that shall include a minimum of the following dust control measures:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.

- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, or water twice daily exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Post a publically visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBUAPCD shall also be visible to ensure compliance with District rules.
- Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the ASR well facilities and the Terminal Reservoir/ASR pump station sites.

(ii) Mitigation Measure 4.8-1b: Stabilize Dust on Access Roads. Project sponsor(s) shall require its construction contractor(s) to apply a soil stabilizer, gravel, or pave the construction access roads to the Regional Desalination Plant and the Terminal Reservoir sites. These access roads shall be stabilized prior to the commencement of construction activities at these sites.

(iii) Mitigation Measure 4.8-1c: Idling Restrictions. On road vehicle idling time shall be minimized and shall not exceed a five minute maximum. Additionally, off road engines will not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Article 4.8, Chapter 9 of the California Code of Regulations. To enforce this measure project sponsor(s) shall ensure that all construction workers are **aware** of vehicle idling restrictions.

(c) Findings. Implementation of Mitigation Measures 4.8-1a through 4.8-1c will substantially reduce Impact 6.8-1 (i.e., lowering PM10 emission

> from 597 pounds per day to approximately 100 pounds per day), but not to a less than significant level. The CPUC has imposed Mitigation Measures 4.8-1a through 4.8-1c on the pertinent CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.8-1a through 4.8-1c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the pertinent Non-CalAm Facilities under those agencies' jurisdiction.

The FEIR also contains proposed Mitigation Measure 6.8-1, which would require the Regional Project sponsor(s) to coordinate with one another and implement a Joint Construction Emissions Control Plan that would phase all Regional Project construction activities so that PM10 emissions during each day of construction would be reduced to a level below the daily PM10 threshold of significance. Since there was no guarantee that all relevant agencies would impose the measure as a condition of approval on the portion of the Regional Project under their jurisdiction to ensure that the emissions would not exceed the MBUAPCD's significance threshold for PM10, the FEIR concludes that Impact 6.8-1 is significant and unavoidable.

Given the urgent need to provide replacement water supplies by December 31, 2016 so as to adhere to the SWRCB's Cease and Desist Order, the CPUC finds that phasing construction activities per Mitigation Measure 6.8-1 would not be feasible from a social or economic standpoint. The measure would require coordination and phasing of construction activities, essentially metering activities so as to avoid exceeding daily maximum PM10 levels. If replacement water supplies are not provided in a timely fashion, the water supply deficit that would result would lead to severe water rationing and possible water shortages throughout the CalAm service area. This would create substantial social hardships (e.g., reduced bathing, clothes washing and waste removal) and could lead to adverse public health and safety impacts (e.g., lack of adequate water for fire protection, public health, etc.). The water supply for nearly one-fourth the population of Monterey County would be put in jeopardy and it could lead to economic losses of over $1 billion per year, including 6,000 jobs. Thus, this

measure is infeasible based on the need to avoid delay providing replacement water supplies. Although the impact would be significant and unavoidable per the MBUAPCD significance threshold, the construction timeframe would be faster, thus temporally concentrating emissions. The CPUC further finds that Mitigation Measure 6.8-1 is infeasible because it relies on the coordination and joint planning efforts of agencies not under the CPUC's jurisdiction and control (i.e., MCWD and MCWRA) and these agencies in fact did not impose this measure as a condition of approval on the Regional Project and thus the basis stated in the FEIR for finding the mitigation measure infeasible has proven to be accurate. As such, the CPUC finds that specific social, economic, technological and other considerations make the imposition of Mitigation Measure 6.8-1 infeasible.

2. Impact 6.8-3: Construction activities associated with Regional Project would generate a cumulatively considerable net increase of PM_{10}.

a. Impact. The project area is designated as non-attainment for ozone and PM10. Long term operations of the project would result in negligible direct emissions, which would not be cumulatively considerable. Construction activities associated with the Regional Project would have a temporary significant impact on regional air quality through short-term increases in PM10, which could be cumulatively significant when combined with other project described in Chapter 9 of the FEIR.

b. Mitigation. Implement Mitigation Measures 4.8-1a through 4.8-1c. These measures require the implementation of a fugitive dust control plan, application of soil stabilizers to construction access roads and limitation of construction vehicle idling time.

c. Findings. Implementation of Mitigation Measures 4.8-1a through 4.8-1c would reduce the Regional Project's maximum daily construction emissions of PM10, but not to a less than significant level. The CPUC has imposed

Mitigation Measures 4.8-1a through 4.8-1c on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.8-1a through 4.8-1c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction. For the reasons described in Impact 6.8-1 above, the CPUC finds that specific social, economic, technological and other considerations make Mitigation Measure 6.8-1 infeasible.

3. **Impact 6.8-5: Regional Project operations would conflict with the State goal of reducing greenhouse gas emission in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006.**

a. Impact. Implementation of the Regional Project could conflict with the State goal of reducing greenhouse gas emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006. The Regional Project could conflict with certain recommended actions identified by the California Air Resources Board (CARB) in its Climate Change Scoping Plan related to transportation, water and high global warming potential gases. Approximately 5,800 metric tons of carbon dioxide equivalent emissions (CO2e) would be generated each year during the estimated two-year construction phase of the project. Thus, the estimated construction-related emissions would not exceed CARB's draft preliminary significance threshold of 7,000 metric tons of CO2e per year. Operational-related greenhouse gas emissions associated with the Regional Project are estimated to be approximately 11,209 metric tons of CO2e

per year. These emissions primarily relate to and are directly associated with the electrical needs of the plant itself. The total estimated greenhouse gas emissions that would be associated with the operations of the Regional Project would exceed CARB's preliminary draft significance threshold of 7,000 metrics tons of CO2e per year. This is a significant cumulative impact. While the greenhouse gas emissions for the Regional Project as a whole would exceed CARB's draft preliminary significance threshold, the greenhouse gas emissions for the CalAm Facilities would be fairly minimal and would be far less than 7,000 metric tons of CO2e per year.

b. Mitigation. Implement Mitigation Measure 4.8-1c, above, which imposes limits on the idling time of construction vehicles, and also Mitigation Measure 4.8-5, which consists of the following:

(i) Mitigation Measures 4.8-5a: Aerodynamic Efficiency for Trucks. Trucks and trailers that would be used after year 2013 to haul equipment and materials to construction sites associated with the project would be required to be retrofitted with the best available aerodynamic efficiency technology and/or CARB approved aerodynamic efficiency technology to reduce greenhouse gas emissions and improve fuel efficiency by reducing aerodynamic drag and rolling resistance pursuant to CARB's Climate Change Scoping Plan Discrete Early Action T-7.

(ii) Mitigation Measures 4.8-5b: Low SF6 Leak Rate Circuit Breaker and Monitoring. If an SF6-containing circuit breaker is required for the project substation, the project sponsor shall ensure that the circuit breaker would have a guaranteed SF6 leak rate of 0.5 percent per volume or less. The project sponsor shall provide the MBUAPCD with such documentation prior to installation of the circuit breaker. In addition, the project sponsor shall also monitor SF6-containing circuit breakers consistent with Scoping Plan Measure H-6 for the detection and repair of leaks.

(iii) Mitigation Measure 4.8-5c: Energy Minimization and greenhouse gas Reduction Plan. The project sponsor(s) shall develop and implement an Energy Minimization and Greenhouse Gas Reduction Plan that

documents an approach that would reduce the project's carbon footprint to below 7,000 metric tons per year. The plan may include a variety of measures to reduce the combined carbon footprint of the intake, treatment, and distribution components of the project, including the installation of premium energy efficient equipment (i.e., state of the art energy recovery systems), participation on PG&E's Climate Smart Program, LEED compliant facilities, roof-top or locally produced solar power, use of renewable energy sources, etc. The carbon footprint for all components of the approved project shall be established and reported each year using real energy usage data for the previous year and the most current PG&E power system emission factor for greenhouse gases (or other emission factor deemed reliable in the absence of a PG&E emission factor). All emission reductions that would be associated with the efficiency measures, etc., shall be substantiated in the plan. The plan shall be reviewed and approved by the CPUC prior to the commencement of project operations.

(iv) Mitigation Measure 4.8-5d: *Energy Minimization and greenhouse gas Reduction Plan*. CalAm shall develop and implement an Energy Minimization and Greenhouse Gas Reduction Plan to reduce the carbon footprint of the CalAm Facilities (primarily associated with pumping of water for the ASR Facilities and the Terminal Reservoir) to the extent feasible. At minimum, the plan shall require the installation of energy efficient equipment and use of renewable energy sources. All emission reductions that would be associated with efficiency measures shall be substantiated in the plan. The plan shall be reviewed and approved by the CPUC prior to the commencement of project operations.

c. Findings. Implementation of Mitigation Measures 4.8-1c and Mitigation Measures 4.8-5a, 4.8-5b and 4.8-5d would reduce Impact 6.8-5, but not to a less than significant level for the Regional Project as a whole. Mitigation Measure 4.8-5d was not in the FEIR, but it was developed by the CPUC based upon relevant portions of Mitigation Measure 4.8-5c so as to impose feasible elements of Mitigation Measure 4.8-5c on the CalAm Facilities. The CPUC has imposed Mitigation Measures 4.8-1c, 4.8-5a and 4.8-5d on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. Mitigation Measure 4.8-5b applies only to the desalination plant and thus not to the

> CalAm Facilities. The CPUC finds that Mitigation Measures 4.8-1c and Mitigation Measures 4.8-5a and 4.8-5b can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and these measures have already been imposed by MCWD and MCWRA on the pertinent Non-CalAm Facilities under those agencies' jurisdiction.

The FEIR recommended implementation of Mitigation Measure 4.8-5c, which would require the project sponsor(s) to jointly develop and implement an Energy Minimization and Greenhouse Gas Reduction Plan to reduce the carbon footprint of all collective components of the Regional Project to below 7,000 metric tons CO2e per year. The FEIR also noted that because several components of the Regional Project would occur under the jurisdiction of other agencies, there is no way for the CPUC to require implementation of Mitigation Measure 4.8-5c in connection with the Non-CalAm Facilities so as to ensure that total emissions would not exceed the significance threshold. The FEIR thus concluded that the impact was significant and unavoidable. Neither MCWD nor MCWRA, i.e., the agencies that would own and operate facilities that would generate most of the operational-related greenhouse gas emissions, imposed this measure as a condition of approval on the Regional Project. MCWD did impose a different Mitigation Measure 4.8-5c in connection with its action on the project, requiring development and implementation of an Energy Minimization and greenhouse gas Reduction Plan to reduce the project's carbon footprint "to the extent feasible." The CPUC has imposed Mitigation Measure 4.8-5d set forth above (a modified version of Mitigation Measure 4.8.-5c) on the CalAm Facilities. Because several components of the Regional Project would occur under the jurisdiction of other agencies, there is no way for the CPUC to require that total emissions would not exceed the significant threshold. As such, the CPUC finds that Mitigation Measure 4.8-5c is infeasible for social, economic, technological, and other considerations.

I. Noise and Vibration

1. Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.

a. Impact. Construction activities associated with the Regional Project would occur at numerous

> locations throughout western Monterey County. Such activities would result in the generation of noise associated with site preparation and building of each component. The noise levels generated during construction of the project would vary during the construction period, depending upon the construction phase and the types of construction equipment used. High noise levels would be created by the operation of heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, compactors, scrapers, and other heavy-duty equipment. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three or four minutes at lower power settings, compared to other equipment such as directional drill rigs, which tend to operate at a continuous level, or hammer bore rigs, which may emit a loud noise every few seconds. It is anticipated that noise levels within 50 feet of the construction activities would generally be in the mid-90 dBA range.

The progress rates of the various pipeline construction spreads would vary from approximately 250 feet to 500 feet per day. Therefore, maximum noise levels at any one location would be limited to a period of one to three days. However, required trenchless pipeline installation technology and well drilling activities may be required to occur continuously on a 24-hour basis. Maximum pipeline and well development construction noise levels would be as high as 90 dBA and 99 dBA, respectively. Nighttime noise from continuous well development activities associated with the Regional Project components would result in a substantial nuisance to nearby residences, as well as conflict with noise regulations identified in the City of Marina Code, the Monterey County General Plan, and the City of Seaside Municipal Code. Therefore, depending on the location of the drill sites, nighttime drilling activities would result in potentially significant impacts because they would disturb noise-sensitive uses during the nighttime.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.9-1a through 4.9-1g as detailed below:

(i) Mitigation Measure 4.9-1a: The contractor shall locate all stationary noise-generating equipment as far as possible from nearby noise-sensitive receptors. Contractor specifications shall include a requirement that drill rigs located within 500 feet of noise-sensitive receptors shall be equipped with noise reducing engine housings or other noise reducing technology such that drill rig noise levels are no more 85 dBA at 50 feet, and the line of sight between the drill rig and nearby sensitive receptors shall be blocked by portable acoustic barriers and/or shields to reduce noise levels by at least an additional 10 dBA. For nighttime drilling activities within 500 feet of residences, the drill rig sites shall be equipped with noise control blankets designed to achieve a Sound Transmission Class (STC) rating of 25 or more so that noise levels 50 feet from the drilling site would be no more 60 dBA.

(ii) Mitigation Measure 4.9-1b: All non-ASR well development construction- related activities shall occur only between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between 9:00 a.m. and 7:00 p.m. Saturdays, or as agreed upon by the local jurisdiction.

(iii) Mitigation Measure 4.9-1c: The contractor shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.

(iv) Mitigation Measure 4.9-1d: Residents and other sensitive receptors within 500 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior to the commencement of construction activities. A designated noise disturbance coordinator shall be responsible for responding to complaints regarding construction noise, determining the cause of the complaint and ensuring that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and included in the construction schedule notification sent to nearby residents. The notice to be distributed to residents and sensitive receptors within the City of Seaside shall first be submitted to the City of Seaside Planning and Services Manager for review and approval.

(v) Mitigation Measure 4.9-1e: The ASR well development construction contractor shall obtain approval from a City of Seaside Building

Official to conduct night-time well development construction activities. In addition, the applicant shall submit to the CPUC and the City of Seaside Planning Services Manager an ASR Well Construction Noise Control Plan for review and approval, incorporating Mitigation Measures 4.9-1a through 4.9-1d and identifying all feasible noise control procedures that would be implemented during night-time construction activities.

(vi) Mitigation Measure 4.9-1f: If the ASR well facilities are constructed adjacent to Roger S. Fitch Middle School, construction activities shall take place while classes are not in session.

(vii) Mitigation Measure 4.9-1g: Temporary hotel accommodations shall be provided by the project sponsor to all residents located within 50 feet of a designated construction area where construction activity would occur on a 24-hour continuous basis. The accommodations shall be provided for the duration of the 24-hour construction activities.

c. Findings. Implementation of Mitigation Measures 4.9-1a through 4.9-1g will reduce Impact 6.9-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.9-1a through 4.9-1g on the pertinent CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.9-1a through 4.9-1g can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and, to the extent applicable, these measures have already been imposed by MCWD and MCWRA on the pertinent Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.9-2: Operation of the proposed desalination plant and other conveyance facilities would potentially increase existing noise levels, which could exceed noise level standards and/or result in nuisance impacts.

a. Impact. Although operational noise impacts at nearby residences would be less than significant, Monterey County's community noise exposure limits (FEIR Table 4.9-3) define noise levels to be

normally acceptable at industrial facilities, such as the water treatment plant facilities, at Ldn levels up to 75 dBA. Pump noise levels at the plant are estimated to reach an Ldn level of 82 dBA. Therefore, pump noise levels at the plants could be potentially significant. Further, noise levels of wells and other stationary sources would be as high as 63 dBA at 50 feet, which would exceed Monterey County, City of Marina and City of Seaside noise standards for residences. Therefore, operational noise impacts would be potentially significant.

b. Mitigation. Per Mitigation Measure 4.9-2, all stationary noise sources (e.g., pump stations, permanent and emergency power generators, variable frequency drive motors, well heads with motors, etc.) shall be located within enclosed structures with adequate setback and screening, as necessary, to achieve acceptable regulatory noise standards for industrial uses as well as to achieve acceptable levels at the property lines of nearby residences, as determined by the applicable local jurisdiction. Noise enclosures shall be designed to reduce equipment noise levels by at least 20 dBA. Once the stationary noise sources have been installed, noise levels shall be monitored to ensure compliance with local noise standards. If project stationary noise sources exceed the applicable noise standards, an acoustical engineer shall be retained by the project sponsor to install additional noise attenuation measures in order to meet the applicable noise standards.

c. Findings. Implementation of Mitigation Measures 4.9-2 will reduce Impact 6.9-2 to a less than significant level. The CPUC has imposed Mitigation Measure 4.9-2 on the CalAm Facilities as a condition of approval of the CPCN and

implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.9-2 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the pertinent Non-CalAm Facilities under those agencies' jurisdiction.

3. **Impact 6.9-3: Short-term construction within the Regional Project area would result in temporary vibration impacts on nearby sensitive receptors and structures.**

   a. Impact. Some types of construction can produce vibration levels that can cause architectural damage to structures and be annoying to nearby sensitive receptors. Vibration levels generated during construction of the Regional Project would vary, depending upon the construction phase and the types of construction equipment used at any time. Typical vibration levels for the construction equipment types that would generally result in the highest vibration levels (i.e., drill rig, large bulldozer) range from 0.006 in/sec peak particle velocity (PPV) at a distance of 150 feet to 0.089 in/sec PPV at a distance of 25 feet. PPV thresholds identified by the California Department of Transportation were used in the FEIR to determine the significance of vibration impacts related to adverse human reaction and risk of architectural damage to normal buildings, which are 0.010 in/sec and 0.20 in/sec respectively. Therefore, construction activities with a drill rig/large bulldozer within 100 feet of sensitive receptors could cause potentially significant vibration annoyance impacts.

   b. Mitigation. Implement Mitigation Measures 4.9-1b and 4.9-1d. Mitigation Measure 4.9-1b would limit hours of construction for all non-ASR well development construction-related activities.

Mitigation Measure 4.9-1d would require notice of the construction schedule to nearby residents and designation of a noise disturbance coordinator to respond to complaints regarding construction noise, determine the cause of the complaint and ensure that reasonable measures are implemented to correct any problems.

c. Findings. Implementation of Mitigation Measures 4.9-1b and 4.9-1d will reduce Impact 6.9-3 to a less than significant level. The CPUC has imposed Mitigation Measures 4.9-1b and 4.9-1d on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.9-1b and 4.9-1d can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

J. Land Use, Agriculture and Recreation

1. Impact 6.10-1: Components of the Regional Project may permanently divide or temporarily disrupt an established community.

a. Impact. Operation of the Regional Project would not permanently divide an established community; however, construction of the Regional Project facilities, particularly associated with installation of pipelines, may temporarily disrupt adjacent land uses within an established community in that construction activities would generate noise, dust and traffic impacts that could affect adjacent land uses.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.10-1a through 4.10-1c as specified below:

(i) Mitigation Measure 4.10-1a: Implement the Traffic Control and Safety Assurance Plan element recommended in Mitigation Measure 4.7-1 to develop detours during construction activities to allow traffic, pedestrian, and service flow within and among existing communities.

(ii) Mitigation Measure 4.10-1b: Implement the Traffic Control and Safety Assurance Plan element recommended in Mitigation Measure 4.7-4 to carry out construction activities in a manner that allows access along bike routes and pedestrian pathways to ensure safe access for pedestrians and bicyclists. During construction of the Regional Project, the project sponsor shall implement detours adjacent to the existing bike paths, sidewalks, and hiking trails that will be affected by construction in order to maintain access to and along paths.

(iii) Mitigation Measure 4.10-1c: Disturbed areas shall be restored after construction through repaving roads and sidewalks, replacing uncontaminated soil that was been removed, and replanting areas where vegetation was removed with the same or comparable species.

c. Findings. Implementation of Mitigation Measures 4.10-1a through 4.10-1c will reduce Impact 6.10-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.10-1a through 4.10-1c on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.10-1a through 4.10-1c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.10-3: Implementation of the proposed project could result in the permanent removal of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance from agricultural operation, or involve other changes that could result in conversion of farmland to nonagricultural use as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural sue.

a. Impact. Construction of the Regional Project, in particular the seawater intake wells, could temporarily conflict with established agricultural resources. In addition, the proposed location of the seawater subsurface intake wells could potentially affect Prime Farmland. The vertical wells would be located within an area located along the eastern edge of the beach dunes and west of Highway 1, in an area south of the Salinas River and north of Reservation Road. Land within the footprint of the proposed seawater well area and surrounding the proposed seawater intake wells is classified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland by the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency. However, there is flexibility in placing the seawater intake wells so that permanent conversion of important farmland could be avoided during siting and design. Results of a site assessment of the seawater well study area indicate that the wells would likely be located within the southern portion of the study area, east of the coastal dunes and west of Highway 1 on lands classified as Other Land under the FMMP. The FEIR assumes that the wells would be located within the southern portion of the seawater well study area and would therefore have a less than significant impact to existing agricultural land. However, identification of Prime Farmland and avoidance of agricultural land in site selection would further limit direct effects to agricultural land.

b. Mitigation. The project sponsor shall implement Mitigation Measure 4.10-3 and Mitigation Measure 6.10-3 as specified below:

(i) Mitigation Measure 4.10-3: To the extent feasible, the project sponsor shall develop a construction schedule that avoids conflict with growing

seasons and rotation patterns of crops that could be impacted by construction activities for portions of the proposed alignment that cross or are adjacent to agricultural land. The project sponsor shall implement Best Management Practices (BMPs) during construction to minimize dust.

(ii) Mitigation Measure 6.10-3: Identification and avoidance of prime agricultural land will occur during the design phase. Areas that contain Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Site selection of well sites should avoid important farmland areas and restrict construction to existing easements, right-of-ways, or agricultural roads. During implementation, construction impacts will be mitigated by practicing soil-saving techniques, replacing soils, re-vegetating disturbed areas, and siting staging areas away from areas under cultivation.

c. Findings. Implementation of Mitigation Measure 4.10-3 and Mitigation Measure 6.10-3 will reduce Impact 6.10-3 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that Mitigation Measure 4.10-3 and Mitigation Measure 6.10-3 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWRA on the Non-CalAm Facilities under that agency's jurisdiction.

3. Impact 6.10-4: Project facilities could conflict with agricultural zoning or Williamson Act contracts.

a. Impact. There are two parcels protected under a Williamson Act contract that could be affected by the location of the seawater intake wells. The FEIR acknowledges, however, that there is flexibility in placing the seawater intake wells so as to avoid a significant impact to these lands. Nonetheless, identification of farmland under Williamson Act contract and proper facility siting would limit the impacts to existing Williamson Act contracts.

b. Mitigation. Implement Mitigation Measure 6.10-3. This measure requires that project facilities avoid important farmland areas and restricts

construction to existing easements, rights-of-way and agricultural roads.

c. Findings. Implementation of Mitigation Measure 6.10-3 will reduce Impact 6.10-4 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that Mitigation Measures 6.10-3 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWRA on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

K. Public Services and Utilities

1. Impact 6.11-1: Potential damage to or interference with existing public utilities.

a. Impact. Construction activities could result in damage to or interference with existing water, sewer, storm drain, natural gas, electric and/or communication lines and, in some cases could require that existing lines be permanently relocated, potentially causing interruption of service. Trench construction – for source water, outfall, product water conveyance pipelines and ASR and injection well pipelines – is the project activity most likely to cause severe disruption. If specific locations of underground utilities are not located prior to construction, the utility lines could be damaged and the associated services interrupted.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.11-1a through 4.11-1i. In general, these measures would require the project sponsor or it contractors to undertake the following measures prior to commencing excavation work: locate utilities, notify Utilities Service Alert, implement appropriate protective

measures and notify customers in advance of planned disruption.

c. Findings. Implementation of Mitigation Measures 4.11-1a through 4.11-1i will reduce Impact 6.11-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.11-1a through 4.11-1i on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.11-1a through 4.11-1i can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.11-2: Potential short-term increase in demand for police, fire, or emergency services.

a. Impact. Project construction would generate truck and employee traffic along haul routes and at the project component sites, temporarily increasing the potential for accidents in these areas. However, this increased accident potential would result in a limited, short-term demand for additional police or fire services, and only on an as-needed and emergency basis. This short-term increase in demand could be accommodated by existing resources within the project areas. In addition, construction of pipelines in or adjacent to roadways could result in partial or complete road closure and would impair local fire, police, or other emergency access during this period. Disruption of roadway access and increased accident potential could also occur in the event of a pipeline rupture or other emergency upset condition. Such an event could also temporarily increase demand for police and fire services as well as impair emergency access.

b. Mitigation. Implement Mitigation Measure 4.7-1 and Mitigation Measures 4.11-1a through 4.11-1i. Mitigation Measure 4.7-1 requires the preparation and approval of a detailed Traffic Control and Safety Assurance Plan to minimize impacts to traffic circulation patterns as result of construction activities. Mitigation Measures 4.11-1a through 4.11-1i specify procedures to follow in order to avoid potential damage to or interference with existing public utilities.

c. Findings. Implementation of Mitigation Measure 4.7-1 and Mitigation Measures 4.11-1a through 4.11-1i will reduce Impact 6.11-2 to a less than significant level. The CPUC has imposed Mitigation Measure 4.7-1 and Mitigation Measures 4.4.11-1a through 4.11-1i on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.7-1 and Mitigation Measures 4.11-1a through 4.11-1i can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

3. Impact 6.11-3: Potential adverse effects on solid waste landfill capacity and/or failure to achieve state-mandated solid waste diversion rates.

a. Impact. Construction of the Regional Project desalination plant would generate approximately 200 cubic yards of construction and demolition waste over the construction period. Most of the trench spoils (i.e, excavated soil) would be stockpiled and used to backfill the trenches. However, an average of 0.9 cubic yards of soil per lineal foot of pipeline would exceed trench capacity and would be exported. Construction of

six vertical intake wells for the desalination plant component would generate approximately 288 cubic yards (48 cubic yards each) of spoils. The Monterey Regional Waste Management District (MRWMD) landfill is permitted to accept 3,500 tons per day and has an expected remaining site life of approximately 100 years. Based on data from 2005 through 2007, MRWMD's current daily receipts are considerably less than it is permitted to receive, indicating that the landfill could accept a substantial increase in incoming disposal tonnage without exceeding its permitted daily tonnage or depleting substantial long-term capacity. If the solid waste generated by the Regional Project were disposed at the landfill rather than reused or recycled, it could substantially increase the disposal rates of jurisdictions in the project area and would thereby lower their diversion rates for the purpose of calculating AB 939 diversion, and could exceed the landfill's permitted daily tonnage, depending on timing of the delivery of waste loads to the landfill.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.11-3a through 4.11-3c as specified below:

(i) Mitigation Measure 4.11-3a: The project sponsor shall encourage project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused.

(ii) Mitigation Measure 4.11-3b: The project sponsor shall include in its construction specifications a requirement for the contractor to describe plans for recovering, reusing, and recycling wastes produced through construction, demolition, and excavation activities.

(iii) Mitigation Measure 4.11-3c: Prior to project approval the project sponsor shall demonstrate to the project sponsor that the residuals and solid waste generated by the greensand filtration process are acceptable and will be accepted for disposal at the MRWMD landfill. If the waste from the

greensand process is determined by MRWMD not to be acceptable, the project sponsor shall identify the permitted waste facility to which the waste will be taken for disposal. This waste facility shall be approved for accepting the type of waste generated and have adequate capacity to accept the waste over the life of the project.

c. Findings. Implementation of Mitigation Measures 4.11-3a through 4.11-3c will reduce Impact 6.11-3 to a less than significant level. The CPUC has imposed Mitigation Measures 4.11-3a and 4.11-3b on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.11-3a through 4.11-3c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

4. Impact 6.11-4: Potential adverse effects on wastewater treatment facilities.

a. Impact. Operation of the desalination plant involves use of clean-in-place (CIP) chemical solutions. The neutralized solution from this process (referred to here as CIP backwash water) would be trucked to the MRWPCA brine ponds for eventual disposal at MRWPCA outfall. The project is estimated to produce 6,000 gallons of CIP backwash water (two truckloads) per month. The chemicals that could be used in the CIP process include sodium hydroxide and EDTA. While the project sponsor has indicated that he CIP backwash water would be neutralized prior to delivery to MRWPCA, it has not yet demonstrated that the neutralized water would meet MRWPCA criteria for acceptable waste streams. If the CIP backwash water were incompatible with MRWPCA's treatment

capacity or brine ponds, the backwash could adversely impact the treatment plant's operations. The addition of 6,000 gallons of CIP backwash water also could exceed the plant's capacity. In addition, the salinity level of the brine discharged from the desalination plant could have corrosive effects on outfall components. Corrosion resulting from high salinity levels could weaken the outfall structures, leading to failure.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.11-4a and 4.11-4b. In summary, Mitigation Measure 4.11-4a requires that CIP waste be neutralized, tested and logged prior to transport to the MRWPCA or discharge to the MRWPCA sewer system in accordance with all MRWPCA regulations and standards. Mitigation Measure 4.-11-4b require the project sponsor to conduct a study to evaluate whether brine salinity levels will lead to pipeline corrosion and, if so, to identify and implement appropriate corrective measures to reduce corrosion potential.

c. Findings. Implementation of Mitigation Measures 4.11-4a and 4.11-4b will reduce Impact 6.11-4 to a less than significant level. This impact does not affect the CalAm Facilities. The CPUC finds that Mitigation Measures 4.11-4a and 4.11-4b can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

L. Aesthetic Resources

1. Impact 6.12-2: Permanent facilities could have an adverse effect on scenic vistas, damage scenic resources, or degrade the existing visual character or quality of the site and its surroundings.

a. Impact. The Regional Project could result in significant aesthetic impacts associated with the Terminal Reservoir, Valley Greens Pump Station and the Intake Wells.

The Terminal Reservoir would consist of a 500 by 600 foot fenced area containing two 3 million gallon tanks, 33 feet in height and 130 feet in diameter. It would be built on a hill in low growing coastal scrub vegetation. Due to the height and mass of the large reservoir tanks, the Terminal Reservoir is dominant to other features in the landscape, even when viewed from a distance. Because the surrounding landscape is made up of shrubs and devoid of trees or other massive objects, the reservoir would constitute a feature that is out of context and would likely impair horizon and skyline views for traveling motorists and horizon views for nearby residents. Because the site has a moderate aesthetic resource value, the resulting visual impact would be potentially significant.

The Valley Greens pump station would be constructed near the intersection of Carmel Valley Drive and Valley Greens Drive. While specific designs have not yet been developed, the functional requirements of the pump station require a small scale facility that would be compatible with other architectural features in the area. Because the site has a moderate aesthetic resource value, the resulting visual impact would be potentially significant.

Construction of the subsurface intake wells would involve drilling of six vertical seawater wells. The exact location of individual wells is pending detailed geotechnical investigations, but would be located in a zone west of SR 1 south of the mouth of the Salinas River and north of Dunes Road. These wells are likely to be visible from SR 1 (particularly in the southbound lanes) and could detract from views of the California Coastal Zone if placed in the foreground of views of the large coastal dunes. Generally, these views are a highly valued public resource and therefore, long term operation of the wells could potentially degrade the visual quality of the site and its surroundings. In most cases, the surface well facilities would be small enough and distant enough from potential observers that the impact severity (contrast) of the facilities would be low. However, because well locations are unknown, placement could occur in foreground areas near SR-1 and coastal residences or potentially be in conflict with local policies and regulations. For these reasons, the intake wells could result in a potentially significant impact.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.12-2a through and 4.12-2c as specified below:

(i) Mitigation Measure 4.12-2a: The applicant shall implement architectural features into the facility design so they complement the building styles of the community (e.g. nautical or agricultural style) and minimize visual mass. Exterior finishes should avoid reflective surfaces. Colors for larger visible tanks and structures should be darker earth tones to reduce contrast with the ground plain and increase compatibility with the visual setting. Primary structures should combine multiple complementary colors such in ranges of browns, tans, grays, greens, or other colors agreed upon with the appropriate permitting agency.

(ii) Mitigation Measure 4.12-2b: The applicant shall design fencing to be minimally intrusive to the community yet complementary to the architectural character of the facility and the community. Fencing will be coordinated with landscaping and facility design to help further enhance the local aesthetics and to blend the facility with the surrounding community and/or natural setting. Vegetative screening using native plants, trees or shrubs will be used if it is not out of character with the site setting, and walled perimeters will be avoided in natural settings to minimize the dominance of structures in the scene.

(iii) Mitigation Measure 4.12-2c: If location of facilities is flexible, structures, roads and ponds should be placed to minimize their prominence in the landscape and proximity to roads, publicly accessible viewpoints and residences. If possible, facilities should be located away from sensitive landscape units, and if necessary screened to minimize visual contrast with the surrounding setting.

c. Findings. Implementation of Mitigation Measures 4.12.-2a through 4.12-2c will reduce Impact 6.12-2 to a less than significant level. The CPUC has imposed Mitigation Measures 4.12-2a through 4.12-2c on the pertinent CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.12-2a through 4.12-2c can and should be imposed by other agencies with jurisdiction on

the pertinent Non-CalAm Facilities and has already been imposed by MCWRA on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

2. **Impact 6.12-3: Exterior lighting associated with proposed facilities would create new sources of light and glare in the surrounding areas.**

   a. Impact. Increased lighting and glare emanating from planned lighting locations could detract from nighttime views, particularly for nearby sensitive observers and motorists. Many project components would be constructed on undeveloped land where surrounding light sources are limited to sporadic light fixtures on farm buildings and security lighting in adjacent industrial areas. Other projects would be located within existing urban areas where additional lighting is unlikely to create a noticeable or distracting visual effect. New lighting would be necessary for site safety and security at these new and visible facilities and could create new sources of light or glare that could adversely affect day or nighttime views. Parking areas associated with the desalination and treatment plants would include minimal nighttime lighting for security purposes.

   b. Mitigation. The project sponsor shall implement Mitigation Measures 4.12-3a and 4.12-3b, which requires that the project's exterior lights be shielded and directed away from adjoining uses to prevent spillage onto adjacent properties.

   c. Findings. Implementation of Mitigation Measures 4.12-3a and 4.12-3b will reduce Impact 6.12-3 to a less than significant level. The CPUC has imposed Mitigation Measures 4.12-3a and 4.13-3b on the pertinent CalAm Facilities as a condition of approval of the CPCN and

implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.12-3a and 4.12-3b can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD on the pertinent Non-CalAm Facilities under that agency's jurisdiction.

M. Cultural Resources

1. Impact 6.13-1: Project construction has the potential to affect known archaeological resources.

a. Impact. Ground disturbance associated with all physical project components could adversely impact both known and previously undiscovered important archeological resources, including two cultural resources (a fenceline and a narrow-gauge railroad grade) identified in the intake wells area. This is a potentially significant impact.

b. Mitigation. The project sponsor shall implement Mitigation Measures 4.13-1a through 4.13-1d. These measures require pre-construction surveys of cultural resources for project areas not previously surveyed. If cultural resources are discovered, the resource shall be avoided if feasible. If avoidance is not feasible, the resource shall be evaluated for importance or eligibility for the California Register of Historic Resources (CRHR). If the resource is deemed important or eligible for the CRHR, then a data recovery program must be implemented. The project sponsor is also required to develop a Cultural Resources Treatment Plan (CRTP) for all known and newly discovered cultural resources within areas of direct impact of project activities. Construction supervisory personnel shall be notified of the existence of these resources and

required to keep personnel and equipment away from these areas. Periodic monitoring of cultural resources to be avoided shall be completed by a qualified archeologist to ensure that no inadvertent damage to the resources occurs as a result of construction or construction-related activities.

c. Findings. Implementation of Mitigation Measures 4.13-1a through 4.13-1d will reduce Impact 6.13-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.13-1a through 4.13-1d on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that 4.13-1a through 4.13-1d can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.13-2: Unanticipated archaeological discoveries may be damaged or destroyed during project construction.

a. Impact. All of the project components require ground disturbing activity that could result in the destruction of cultural resources. Unknown and potentially significant cultural resources could exist within areas of ground disturbance during construction of the project components. Destruction of potentially significant cultural resources without mitigation would be a significant impact.

b. Mitigation. In accordance with Mitigation Measure 4.13-2, prior to the initiation of construction or ground disturbing activities, all construction personnel shall be alerted to the possibility of buried cultural remains, including prehistoric and/or historic resources. During

construction and operations, personnel and equipment shall be restricted to the project work site. Personnel shall be instructed that upon discovery of buried cultural materials, work in the immediate area of the find shall be immediately halted. Once the find has been identified by a qualified archaeologist, then the project sponsor shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the find is found to be important per CEQA (Appendix K). Application of Mitigation Measure 4.13-1b (specifying that avoidance of cultural resources as the preferred mitigation measure) would be appropriate if the find can be avoided. In the case that that the find cannot be avoided, Mitigation Measures 4.13-2c-d shall be implemented.

c. Findings. Implementation of Mitigation Measure 4.13-2 will reduce Impact 6.13-2 to a less than significant level. The CPUC has imposed Mitigation Measures 4.13-2 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.13-2 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

3. Impact 6.13-3: Potential to uncover human remains.

a. Impact. All of the project components require ground disturbing activities that could result in the discovery of human remains. Ground disturbing activities have the potential to uncover both historic-era and pre-historic human remains. For prehistoric resources, shellmounds in the Monterey Bay Area often contain human remains.

For historic-era, there is also the potential to discover human remains outside of the boundary of an established cemetery. Discovery of human remains without mitigation would be a significant impact.

b. Mitigation. Per Mitigation Measure 4.13-3, if buried human remains are encountered during construction, work shall be immediately halted, and the project sponsor and the Monterey County coroner shall be immediately notified. If the remains are determined to be Native American, then the Native American Heritage Commission (NAHC) will be notified within 24 hours as required by Public Resources Code 5097. The NAHC shall notify designated Most Likely Descendants (MLD). The MLD is responsible for providing recommendations for the treatment of the remains within 48 hours of being granted access to the find.

c. Findings. Implementation of Mitigation Measure 4.13-3 will reduce Impact 6.13-3 to a less than significant level. The CPUC has imposed Mitigation Measures 4.13-3 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 4.13-3 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

N. Energy

1. Impact 6.14-1: Construction of the Regional Project could result in the substantial consumption of energy such that existing supplies would be constrained and could result in the wasteful use of energy resources that are not renewable.

a. Impact. Although energy for construction activities would be consumed only during the construction period, it would represent irreversible consumption of finite natural energy resources. Construction energy expenditures would include both direct and indirect uses of energy in the form of fuel and electricity. Indirect energy use typically represents about three-quarters of total construction energy, while direct energy use represents about one-quarter of total construction energy. Direct energy use would include the consumption of petroleum for operation of construction vehicles and the use of electricity for construction equipment, such as welding machines and power tools. Energy consumed by construction power equipment would be relatively minimal, as would construction energy required for lighting and heating of trailers and operation of ancillary electrical equipment. Indirect energy use would include the consumption of energy for the extraction of raw materials, manufacturing, and transportation to make materials used in the construction of the proposed project.

The energy consumption for construction would represent a less than significant impact as construction activities would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Nor would construction activities reduce or interrupt existing electrical or natural gas services due to insufficient supply. Because project construction would not interrupt existing local PG&E service and project-related construction energy demands would not have significant effects on PG&E's energy resources, energy consumption by construction activities would not constitute a significant impact. Nonetheless, the emissions of air pollutants associated with Regional Project construction, including emissions from vehicle and equipment exhaust pollutants, may result in a potentially significant impact.

b. Mitigation. Implement Mitigation Measures 4.8-1c. Implementation of Mitigation Measures 4.8-1c

would ensure that fuel energy consumed in the construction phase would not be wasted by requiring idling restrictions.

c. Findings. Implementation of Mitigation Measure 4.8-1c will reduce Impact 6.14-1 to a less than significant level. The CPUC has imposed Mitigation Measures 4.8-1c on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measures 4.8-1c can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

2. Impact 6.14-2: Operation of the Regional Project would increase long-term consumption of electricity at the project facilities, which could result in the wasteful use of energy resources that are not renewable.

a. Impact. The Regional Project would result in the long-term consumption of electricity, which includes energy produced from non-renewable resources. Electrical power would be used to operate the desalination plan and treated water conveyance systems, and for associated conveyance systems, pumps, lighting, process controls and heating/ventilation/air conditioning systems. The peak annual electrical demand has been estimated at 6.7 megawatts. On an annual basis, the project would consume about 52,344 megawatt hours of electricity. In addition to obtaining power from the PG&E grid, the power supply needs for the project could be supplied from the MRWMD Gas Power Project, MCWRA Hydroelectric Plant, and/or from self-generation of electrical power using natural gas as the generation fuel source. Since the exact

configuration and electrical energy needs and natural gas demands of these alternative supplies are unknown at this stage of project design, it is not possible to fully evaluate their potential impacts over that of obtaining electrical power from the PG&E grid. Because of this uncertainty, power supply options could have the potential to conflict with energy standards and conservation plans and thus, could represent a significant impact.

b. Mitigation. Per Mitigation Measure 6.14-1, an Energy Conservation Plan shall be prepared for the Regional Project. The plan shall evaluate the energy demands for both electrical and natural gas of the selected project power supply against the energy demands of direct use of electricity from the PG&E grid. If the Energy Conservation Plan cannot demonstrate that the proposed power supply other than PG&E grid alone represents the same or less demands on the energy supply system, then the applicant shall power the project from the PG&E grid. Cost cannot be a factor for determining infeasibility.

c. Findings. Implementation of Mitigation Measure 6.14-1 will reduce Impact 6.14-2 to a less than significant level. The CPUC has imposed Mitigation Measures 6.14-1 on the CalAm Facilities as a condition of approval of the CPCN and implementation will be monitored through the MMRP. The CPUC finds that Mitigation Measure 6.14-1 can and should be imposed by other agencies with jurisdiction on the pertinent Non-CalAm Facilities and has already been imposed by MCWD and MCWRA on the Non-CalAm Facilities under those agencies' jurisdiction.

III. ALTERNATIVES TO THE PROJECT

The goal under CEQA is to consider alternatives that would avoid or substantially lessen a project's significant environmental impact(s) while achieving most of the basic project objectives. The project objectives here consist of the following:

- Satisfy CalAm's obligations to meet the requirements of SWRCB Order 95-10;
- Diversify and create a reliable drought-proof water supply;
- Protect the Seaside Basin for long-term reliability;
- Protect listed species in the riparian and aquatic habitat below San Clemente Dam;
- Protect the local economy from the effects of an uncertain water supply;
- Minimize water rate increases by creating a diversified water supply portfolio;
- Minimize energy requirements and greenhouse gas emissions per unit of water delivered to the extent possible;
- Explore opportunities for regional partnerships, consistent with the Administrative Law Decision (Decision 03-09-022, dated September 4, 2003); and
- Avoid duplicative facilities and infrastructure.

There is substantial evidence in the record that the alternatives identified in the FEIR: (1) would not avoid the significant unavoidable impacts to construction air quality and/or operation-related greenhouse gas emissions; (2) are not feasible; and/or (3) would fail to meet most of the basic project objectives. The reasons for rejecting each alternative are discussed below. The reasons for rejecting each alternative are independent and each reason alone is sufficient to support a determination that the alternative is infeasible.

The CPUC, in the exercise of its discretion, and after reviewing the FEIR and other relevant information in the record of proceedings, finds as follows:

A. No Project Alternative

1. Description. This alternative considered the impact of the CWP not going forward, known in CEQA parlance as the No Project Alternative. Under the No Project Alternative, water supply in the CalAm

service area would be severely curtailed, in order to comply with the SWRCB Cease and Desist Order.

2. Comparison to Regional Project. Implementation of the No Project Alternative would avoid the significant impacts of the Regional Project, including the significant unavoidable impacts to construction air quality and operation-related greenhouse gas emissions. The water rationing and possible water shortages that could ensue from the No Project Alternative, however, would potentially affect a variety of other resource areas, including utilities, recreation, biological resources, air quality, land use and population and housing.

3. Findings. The No Project Alternative would fail to achieve any of the basic project objectives, notably including the objectives to meet the requirements of SWRCB Order 95-10, to create a reliable drought-proof water supply, to protect the Seaside Basin, to protect listed species in the riparian and aquatic habitat below San Clemente Dam and to protect the local economy from the effects of an uncertain water supply.

The water supply deficit that would result from the No Project Alternative would lead to severe water rationing and possible water shortages throughout the CalAm service area. In 1995, CalAm served approximately 105,000 customers in the Monterey area, supplying them with approximately 17,000 AFY. Approximately fifty percent of that supply figure (i.e., 8,498 AFY) would be eliminated if replacement supplies were not provided in accordance with the time-frames of the Cease and Desist Order. A 50% water reduction would result in severe negative consequences for CalAm customers. A reduction of this magnitude would create substantial social hardships, including reduced bathing, clothes washing, and waste removal as well as elimination of recreational and aesthetic benefits of water use. In addition, the lack of sufficient water supplies could lead to adverse public health and safety impacts associated with fire protection, bathing and hygiene, waste removal, street cleaning, and related domestic uses.

The lack of sufficient water supplies would, in turn, have potentially significant effects on the local economies within the Monterey Peninsula. A conservative quantification of the economic impact of reduced water use on residential water users is between $17 and $51 million annually. The estimated economic impact of reduced water usage on industrial water users is $261 million annually and the estimated economic impact of reduced water usage on commercial water users is $741 million annually. Thus, the economic impact of

the No Project Alternative could well exceed $1 billion per year and employment losses associated with the deficit in water supplies are estimated to total 6,000 jobs.

The CPUC finds that the No Project Alternative fails to meet most of the basic project objectives and, as a separate ground, is infeasible under CEQA for the social reasons described above, and, as a separate ground, is infeasible under CEQA for the economic reasons described above. Based on the foregoing findings, the CPUC rejects the No Project Alternative.

B. Moss Landing Alternative

1. Description. Under this alternative, the desalination plant would be located on 16 acres at the Moss Landing Power Plant and would be owned and operated by CalAm. The project would include a desalination plant sized to produce 10 mgd of desalinated water. The project would also include a seawater intake system using source water supplied from the existing Moss Landing Power Plant once-through cooling water return system, an open-water brine discharge system through the Moss Landing Power Plant, and a variety of conveyance and storage facilities, including approximately 28 miles of pipeline and an aquifer storage and recovery system. The aquifer storage and recovery system would consist of two existing and two proposed injection/extraction wells. The Moss Landing Alternative would produce 8,800 AFY of desalinated water in non-drought years and 10,900 AFY in drought years that would be delivered to CalAm's Terminal Reservoir for distribution to its customers.

2. Comparison to Regional Project. The FEIR concluded that the Moss Landing Alternative would avoid the Regional Project's significant and unavoidable impacts to construction air quality and operation-related greenhouse gas emissions. The FEIR also noted that, given the Cease and Desist Order, time is of the essence in developing a replacement water supply to cease unauthorized withdrawal of water from the Carmel River and that the potential need to accelerate the construction schedule may make it unrealistic for any of the proposed alternatives to comply with the construction air quality mitigation measure that would limit daily construction activities in order to ensure that construction air quality emissions stay under the significance threshold on a daily basis. As described below, the CPUC finds that the Moss Landing Alternative would not avoid the significant unavoidable impact to construction air quality. The significant unavoidable operational-related greenhouse gas impact of the Regional Project would be mitigated to a less of less than significant with the Moss Landing Alternative.

The FEIR also noted that the Moss Landing Alternative would result in other significant impacts that would not occur as a result of the Regional Project. These include Impact 4.1-9 (the proposed project facilities could be subject to flooding due to a tsunami) and Impact 4.10-2 (components of the project may conflict with applicable land use plans, policies, or regulations of agencies with jurisdiction over the project). While these impacts can be mitigated, they still represent impacts that would not occur under the Regional Project. Further, the Moss Landing Alternative relies on once-through cooling to dilute the project discharge water. As noted below, regulation of once-through cooling is currently under scrutiny in California, and it is anticipated that once-through cooling may be eliminated within the near future. If this were to occur, the Moss Landing plant discharge would contain higher levels of contaminants and salinity due to the absence of once-through cooling flows. The undiluted brine discharge would be more concentrated and therefore could exceed the regulatory water quality objectives for Monterey Bay and/or adversely affect the receiving water quality. As explained in Impact 9-2 of the FEIR, if once-through cooling were not allowed, the Moss Landing Alternative would have a significant and unavoidable cumulative impact to water quality.

3. Findings. In light of the strict time-frames imposed by the Cease and Desist Order, the CPUC finds that Mitigation Measure 4.8-1d, like Mitigation Measure 6.8-1a, is infeasible for social and economic reasons since it would lead to delays in providing sufficient replacement water supplies to the residents of Monterey County. Although temporary in nature, these delays could lead to severe water rationing and possible water shortages throughout the CalAm service area and result in significant adverse effects on the environment and the economies of the greater Monterey area. Thus, like the Regional Project, the Moss Landing Alternative would result in a significant unavoidable impact to construction air quality on both a project level and cumulative basis.

Monterey County Code Section 10.72.030(b) prevents private entities from owning desalination plants. CalAm is a privately owned water utility. Thus, CalAm cannot legally own and operate a desalination water facility in Monterey County. To the extent that implementation of replacement water supplies were delayed as a result of litigation or legal uncertainty over this issue or the need to change pertinent law, the Moss Landing Alternative would be unacceptable for social and economic reasons similar to those described above.

In addition, the open water intake and once-through cooling design that would be utilized for the Moss Landing Alternative is environmentally

controversial and subject to increasingly restrictive regulations due to the fact that it impinges and entrains numerous fish and aquatic species. For instance, section 316(b) of the Federal Clean Water Act requires the U.S. Environmental Protection Agency to ensure that the location, design, construction, and capacity of cooling water intake structures of power plants reflect the best technology available to protect aquatic organisms from being killed or injured by impingement or entrainment. Further, on May 10, 2010, the SWRCB approved Resolution 2010-0020, adopting a Proposed Water Quality Control Policy on the Use of Coastal and Estuarine Water for Power Plant Cooling and Associated Certified Regulatory Program Environmental Analysis. In general, the goal of the adopted policy is to ensure that the owner and operator of an existing power plant can reduce impingement mortality and entrainment by either reductions in velocity, flow, or control technologies. In light of the environmental controversy and increasingly strict regulations associated with once-through cooling, the Moss Landing Alternative would likely take longer to get approved and implemented than the Regional Project. Given the strict time-frames to provide replacement supplies under the Cease and Desist Order, the potential delays associated with providing replacement water supplies and uncertainty concerning the future, continued availability of once-through cooling water to supply the desalination plant make the Moss Landing Alternative unacceptable for social and economic reasons similar to those described above.

The Moss Landing Alternative would not achieve several important policy objectives that would be advanced by the Regional Project. The failure to achieve any of these policy objectives provides a separate and independent ground on which to find the Moss Landing Alternative to be infeasible. Unlike the Regional Project, it would not satisfy MCWD's obligations to provide a water supply adequate to meet the approved redevelopment of the former Fort Ord by replacing the 2,400 AFY to have been provided by the previously approved RUWAP project. It would not maximize regional reliability of water resources by integrating the development and allocation of several water supply sources, including desalination, to address existing and projected future demands within the CalAm service area, as well as existing and future demands in other areas of northern Monterey County. Further, it would not enhance funding opportunities available through regional cooperation. Since the Moss Landing Alternative fails to meet these important policy objectives, it is deemed infeasible on social grounds.

The CPUC finds that the Moss Landing Alternative is infeasible under CEQA for the legal reasons described above, and, as a separate ground, is

infeasible under CEQA for the social reasons described above, and, as a separate ground, is infeasible under CEQA for the economic reasons described above, and, as a separate ground, is infeasible under CEQA for the technological reasons described above. Based on the foregoing findings, the CPUC rejects the Moss Landing Alternative.

C. North Marina Alternative

1. Description. The North Marina Alternative consists of much of the same infrastructure as described above for the Moss Landing Alternative except for the intake technology and the outfall. Like the Moss Landing Alternative, the desalination plant proposed as part of the North Marina Alternative would be owned and operated by CalAm. Instead of being located at the Moss Landing Power Plant, however, the desalination plant would be sited on approximately 10 acres of the Armstrong Ranch in North Marina at the same location as the proposed Regional Project desalination plant site. The North Marina Alternative would use a seawater intake system consisting of six new subsurface beach slant wells, an open-water brine discharge system through the existing MRWPCA outfall, project water conveyance and storage infrastructure, including several miles of pipeline and an aquifer storage and recovery system. Similar to the Moss Landing Alternative, the North Marina Alternative would produce 8,800 AFY of desalinated water in non-drought years and 10,900 AFY in drought years that would be delivered to CalAm customers. The North Marina Alternative was designed to be slightly larger than the Moss Landing Alternative (i.e., 11 mgd instead of 10 mgd) so as to be able to produce sufficient supplies to replace groundwater drawn from the Salinas Valley Groundwater Basin (SVGB).

2. Comparison to Regional Project. The FEIR found that the North Marina Alternative would avoid the Regional Project's significant and unavoidable impacts to construction air quality and operation-related greenhouse gas emissions. The FEIR also noted that, given the Cease and Desist Order, time is of the essence in developing a replacement water supply to cease unauthorized withdrawal of water from the Carmel River and that the potential need to accelerate the construction schedule may make it unrealistic for any of the proposed alternatives to comply with the construction air quality mitigation measure that would limit daily construction activities in order to ensure that construction air quality emissions stay under the significance threshold on a daily basis.

The FEIR concludes that the North Marina Alternative would be the environmentally superior alternative because it avoids the Regional Project's impacts to construction air quality and operation-related greenhouse gas emissions. As described below, the CPUC finds that North Marina Alternative would not avoid the significant unavoidable impact to construction air quality. Thus, the only basis on which the North Marina Alternative is environmentally superior to the Regional Project is that it would avoid the Regional Project's significant unavoidable impact to operational-related greenhouse gas emissions. The FEIR contained mitigation measures to address this impact and noted that assuming all mitigation measures were imposed and fully implemented by all pertinent approval and participant agencies, the Regional Project could be the environmentally superior alternative because:

- The Regional Project is a 10 mgd-facility, and as such would require less feedwater than the 11 mgd North Marina Alternative and would also result in less brine being discharged to the ocean;
- The Regional Project would use less energy to generate water in a drought condition;
- The Regional Project would include 6 vertical wells at 200 feet deep, as opposed to 6 slant wells at 750 feet long for the North Marina Alternative, resulting in a shorter drilling period and the need to dispose of less spoil material; and
- Implementation of the Regional Project would eliminate the need for the MCWD to develop its own 3 mgd desalination facility (as previously approved by the MCWD and examined in the RUWAP EIR), and allow for more efficient operations, while minimizing construction and operational impacts to the environment.

3. Findings. In light of the strict time-frames imposed by the Cease and Desist Order, the CPUC finds that Mitigation Measure 4.8-1d, like Mitigation Measure 6.8-1a, is infeasible for social and economic reasons due to the delays associated with providing sufficient replacement water supplies to the residents of Monterey County. Although temporary in nature, these delays could lead to severe water rationing and possible water shortages throughout the CalAm service area and result in significant adverse effects on the environment and the economies within the greater Monterey area. Thus, like

the Regional Project, the North Marina Alternative would result in a significant unavoidable impact to construction air quality on both a project level and cumulative basis.

Monterey County Code Section 10.72.030(b) prevents private entities from owning desalination plants. CalAm is a privately owned water utility. Thus, CalAm cannot legally own and operate a desalination water facility in Monterey County. To the extent that implementation of replacement water supplies were delayed as a result of litigation or legal uncertainty over this issue or the need to change pertinent law, the North Marina Alternative would be unacceptable for social and economic reasons similar to those described above.

Pursuant to Section 21 of the Monterey County Water Resources Agency Act, Water Code Appendix, Chapter 52 (Agency Act), no groundwater from the SVGB may be exported for use outside the basin. Source water pumped from the slant wells proposed as part of North Marina Alternative would include some amount of intruded groundwater from the SVGB. After being processed by the desalination facility for domestic use, this water would be exported from the SVGB for use by CalAm customers. While the North Marina Alternative is intended to be operated so as to return desalinated water to the SVGB in an amount equal to the volume of SVGB-groundwater that is extracted from the North Marina wells, the parties have raised serious concerns about the practical and legal feasibility of this operational measure. MCWD and MCWRA, in particular, have raised significant concerns regarding the legality of this option. In contrast to North Marina Alternative's untested and unproven approach, as part of the Regional Project, MCWD, which is located within the SVGB, has agreed to take and serve to its customers, an annual allocation of desalinated water (i.e., up to 1,700 AFY) equivalent to the amount of groundwater expected to comprise the product water from the desalination facility so as to ensure that groundwater is not exported from the SVGB. The Regional Project also requires the construction of test wells, the data from which will be analyzed by MCWRA to ensure compliance with the Agency Act's restrictions on exportation of groundwater. Specifically, MCWRA will determine the particular types of wells to drill (i.e., slant or vertical) based on analysis of the data and after consultation with MCWD and CalAm. MCWRA will also determine whether the MCWD agreed-upon allocation (i.e., up to 1,700 AFY based on the assumption that the desalination facility source water will include an average of 15% groundwater) can be delivered and have the Regional Project still meet the requirements of the Agency Act. To the extent that implementation of replacement water supplies were delayed as a result of litigation or legal uncertainty over the North Marina

project's ability to comply with the Agency Act or were impaired due to practical challenges associated with returning water to the SVGB, the North Marina Alternative would be unacceptable for social, economic and technological reasons similar to those described above.

Related to the Agency Act issues, the North Marina Alternative could produce insufficient water supplies for CalAm due to the difference between source water and product water. Under the North Marina Alternative, CalAm would have to return water to the SVGB on the basis of quantities of SVGB groundwater within the source water. The quantity of source water is far higher than the quantity of product water after the desalination process. With the Regional Project, the quantity of SVGB groundwater at issue is based upon product water quantities since MCWD, as an overlier of the SVGB, has the right to product water from the SVGB. As a result, less water could be available to CalAm under the North Marina Alternative than under the Regional Project. Thus, the North Marina Alternative could fail to meet the most basic project objective of providing CalAm with sufficient replacement water supplies to meet the requirements of the SWRCB orders and the Seaside Basin groundwater adjudication.

The North Marina Alternative would not achieve several of the important policy objectives that would be advanced by the Regional Project. The failure to achieve any of these policy objectives provides a separate and independent ground on which to find the North Marina Alternative to be infeasible. Unlike the Regional Project, it would not satisfy MCWD's obligations to provide a water supply adequate to meet the approved redevelopment of the former Fort Ord by replacing the 2,400 afy to have been provided by the previously approved RUWAP project. It would not maximize regional reliability of water resources by integrating the development and allocation of several water supply sources, including desalination, to address existing and projected future demands within the CalAm service area, as well as existing and future demands in other areas of northern Monterey County. Further, it would not enhance funding opportunities available through regional cooperation. Since the North Marina Project fails to meet these important policy objectives, it is deemed infeasible on social grounds.

Moreover, MWCD has exercised its option to purchase the land on which CalAm proposed to locate the North Marina plant. Thus, implementation of the North Marina Alternative by CalAm appears infeasible from a practical or technological standpoint.

The CPUC finds that the North Marina Alternative fails to meet most of the basic project objectives and, as a separate ground, is infeasible under CEQA for the legal reasons described above, and, as a separate ground, is infeasible under CEQA for the social reasons described above, and, as a separate ground, is infeasible under CEQA for the economic reasons described above, and, as a separate ground, is infeasible under CEQA for the technological reasons described above. Based on the foregoing findings, the CPUC rejects the North Marina Alternative.

D. Other Alternatives

In addition to the alternatives described above, Sections 7.6 and 7.7 of the FEIR examined four additional alternatives to the CWP. These include the Ship-Based Desalination, Regional Project Phase 1 Plus Seaside Groundwater Basin Replenishment, the CalAm Growth Project, and Regional Project Including Phase 2. In accordance with the conclusions of the FEIR, the CPUC finds that none of these alternatives would eliminate the Regional Project's significant unavoidable impacts to construction air quality and operation-related greenhouse gas emissions. Further, three of the four projects (i.e., all except the Ship-Based Desalination alternative, whose feasibility as a permitted project is uncertain without further investigation) would definitely have more potentially significant environmental impacts than the Regional Project. To implement any of these options would require additional environmental review and be subject to lengthy permitting and entitlements processes. Associated delays would preclude implementation of replacement water supplies in time to satisfy the requirements of the Cease and Desist Order. Thus, these alternatives would be unacceptable for the same social and economic reasons described above.

Section 7.5 of the FEIR also discusses various alternatives to certain project components. The CPUC finds that the design alternatives would not avoid the significant unavoidable impacts to construction air quality and operation-related greenhouse gas emissions. The CPUC further finds that these measures would likely require additional review and permitting processes that would lead to delays in making replacement water available and thus makes these measures infeasible for the same social and economic reasons described above.

IV. SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL IMPACTS

As described above, after implementation of all feasible mitigation measures, the Regional Project will have significant unavoidable impacts to construction air quality (on both a project and cumulative level) and operation-related greenhouse gas emissions. There are no feasible mitigation measures or

alternatives to avoid or reduce these impacts to a less than significant level. See, Part II and Part III, above.

V. STATEMENT OF OVERRIDING CONSIDERATIONS

A. Overriding Considerations. The CPUC has considered the Regional Project's significant and unavoidable impacts set forth above, and weighed the benefits of the Regional Project against the significant unavoidable environmental impacts under CEQA. The CPUC hereby finds that for the reasons set forth below, the Regional Project's benefits and economic, legal, social, environmental and other considerations associated with the Regional Project outweigh and make acceptable the unavoidable impacts identified above, and the CPUC adopts and makes this statement of overriding considerations. The CPUC further finds that each benefit specified below independently provides a sufficient basis to outweigh the Regional Project's significant unavoidable impacts. The CPUC further finds that the benefits of the Regional Project outweigh the benefits of any of the other alternatives examined, including the alternatives deemed infeasible in Part III above.

B. Benefits of the Project. The expected benefits of the Regional Project are:

1. The Regional Project would provide adequate, reliable water supplies for residents of the Monterey Peninsula.

The various components of the Regional Project would result in the provision of 15,200 AFY of replacement water supplies for residents of the Monterey Peninsula. Water would be provided to serve both CalAm and portions of the MCWD service area. The 105,000 customers that CalAm serves (approximately one-fourth of the population of the County) would particularly benefit from the Regional Project. It would allow residential, commercial and industrial activities to continue to exist and flourish within the greater Monterey area. The Regional Project is designed to provide safe and reliable water supplies and avoid the complications associated with relying on surface water and groundwater supplies that led to the need for the Regional Project.

2. The Regional Project would protect and promote the Monterey economy.

Implementation of the Regional Project is estimated to save over $1 billion in economic losses associated with insufficient water supplies. This exceeds the size of the County budget for fiscal year 2009-2010, which was slightly over $950,000. The savings achieved by the Regional Project also equate to

approximately one-fifth of the value of the dollars that the County received in tourism and agriculture in 2006. The Regional Project would also safeguard approximately 6,000 jobs and avoid severe water rationing and possible water shortages.

3. The Regional Project would result in significant environmental benefits to the Carmel River.

Implementation of Regional Project would result in a reduction in CalAm's pumping of river subflows from the Carmel River by as much as 8,498 AFY compared to existing conditions and by as much as 10,730 AFY compared to pre-Order 95-10 conditions. By allowing this water to remain in the Carmel River, the Regional Project will result in significant environmental benefits to federally-listed threatened steelhead and may result in benefits to other special-status species, including the red-legged frog. For instance, operation of the Regional Project will improve opportunities for upstream migration of steelhead by slightly increasing the duration of attracting flows and lengthening the duration of the migration season. The Regional Project will also reduce the risk of stranding juvenile steelhead in the lower Carmel River during summer months as well as during the Fall/Winter period. Further, implementation of the Regional Project will reduce the number of days with a risk of isolating and stranding steelhead smolts during their seaward migrations. In addition, reduced pumping of water from the Carmel River Aquifer may improve the red-legged frog's ability to mature.

4. The Regional Project can take advantage of low-cost financing options that will benefit ratepayers.

Due to the involvement of public agencies, there are low-cost financing options available to implement the Regional Project. The low cost financing opportunities that the public agencies (i.e., MCWD and MCWRA) should be able to access include low-cost State Revolving Fund loans, tax-exempt private activity bonds and various federal and state grants. These financing mechanisms are expected to lower the overall cost of the Regional Project to CalAm's ratepayers. Further, due to generally weak economic conditions, there is a favorable construction climate in California at the present time, affording project sponsors an advantage in regard to negotiating terms of any construction project, but especially a major construction project such as the proposed regional desalination water facility.

5. The Regional Project will allow for more coordinated and comprehensive planning of water supplies on the Monterey Peninsula.

The Regional Project consists of a partnership between CalAm and other regional water supply entities, and addresses water supply demands not only within CalAm's service area, but also in other areas of northern Monterey County. Shortage of water supplies has been a long-standing problem on the Monterey Peninsula. The Regional Project provides for coordination among the various entities that supply water in Monterey County and sets up a framework for current and long-term planning for the area's water needs.

6. The Regional Project will maintain the hydrologic balance of the Salinas Valley Groundwater Basin by adhering to Agency Act.

The Regional Project sponsors agree to maximize the intake of seawater on a cost-effective basis in a way that ensures compliance with the requirements of the Agency Act. As such, through implementation of the Regional Project, MCWRA will satisfy the requirements of the Agency Act, thus maintaining the hydrologic balance of the SVGB. This will protect farmers and agribusiness that participate in and fund the Salinas Valley Reclamation Project, Castroville Seawater Intrusion Project, and the Salinas Valley Water Project.

7. The Regional Project obviates need for an additional desalination plant.

Implementation of the Regional Project would eliminate the need for MCWD to develop its own 3 mgd desalination facility (as previously approved

by MCWD and examined in the RUWAP EIR), which would be needed if the project consisted of a CalAm-only desalination facility. Having one desalination facility instead of two would allow for more efficient operations and minimize construction and operational impacts to the environment.

VI. CUSTODIAN OF DOCUMENTS

The CPUC is designated as the custodian of the documents and other materials that constitute the record of proceedings on which this decision is based. Such documents and other materials are located in the CPUC's offices located at 505 Van Ness Avenue, San Francisco, California, 94102.

(END OF APPENDIX B)

APPENDIX C

MONTEREY REGIONAL WATER SUPPLY PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
SURFACE WATER RESOURCES							
Impact 6.1-1: Project construction activities could cause erosion and increase stormwater runoff resulting in an adverse water quality impact.	**Mitigation Measure 4.1-1**: The project applicant will implement the following: • Develop and implement a monitoring program as required under the General Construction Permit. The project applicant will require the contractor to conduct inspections of the construction site prior to anticipated storm events and after the actual storm events. During extended storm events, the inspections will be conducted after every 24-hour period. The inspections will be conducted to identify areas contributing to stormwater discharge, to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the General Construction Permit, and to determine whether additional control practices or corrective maintenance activities are needed.	X	X	X	X	1. CalAm will include in contract specifications the requirement for implementation of erosion control measures for sensitive areas, and demonstrate compliance to the CPUC. 2. CalAm will include in contract specifications the requirement for development and implementation of an inspection program and associated corrective actions. 3. CalAm will file annual monitoring reports with the CPUC and the RWQCB.	1, 2. Erosion control plan and monitoring program developed prior to start of construction. 2. Inspections conducted prior to anticipated storm events, during and after the actual storm events. 3. Annually by July 1.
Impact 6.1-2: Excavation during construction could require dewatering of shallow groundwater. The water discharge, if contaminated, could adversely affect surface water.	**Mitigation Measure 4.1-2:** The project applicant shall implement the following measures: • Notify the RWQCB prior to discharge of the extracted groundwater and provide the results of the required water quality tests performed; and • Conduct treatment of the extracted groundwater as required under the applicable permit issued by the RWQCB (e.g., waiver, site-specific permit or permit for low-threat discharges).	X	X	X	X	1. CalAm will include in contract specifications the requirement to notify the RWQCB prior to discharge of extracted groundwater, and that extracted ground water will be tested and treated (as required by RWQCB permit) 2. CalAm provides the results of the tests performed to the	1. Prior to discharge of extracted groundwater. 2. Annually during construction period

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
						CPUC.	
GROUNDWATER RESOURCES							
Impact 6.2-1: Components of the Regional Project may violate water quality standards or waste discharge requirements.	**Mitigation Measure 4.2-1:** Prior to pumping development water from all groundwater wells constructed as part of the project, the applicant shall consult with the RWQCB to determine the appropriate discharge permitting for the well development discharge. The permitting requirements will differ depending on the duration of the discharge, the quality of the water to be discharged, and the discharge location. Based on RWQCB consultation, the applicant shall prepare the proper			X		1. CalAm will consult with the RWQCB about permit requirements for pumping of development water. 2. CalAm will prepare the proper Application/Report of Waste Discharge	1. During design 2,3. Prior to construction
GROUNDWATER RESOURCES (cont.)							
Impact 6.2-1 (cont.)	Application/Report of Waste Discharge for the waste discharge requirements or NPDES Permit. If a Report of Waste Discharge is required, it shall include, at a minimum, a characterization of the discharge water, estimates of discharge rates and volumes, characterization of the discharge area and determination of the potential impact to groundwater, soils, surface water, runoff, and flooding. The applicant shall provide a copy of the Application\Report of Waste Discharge to the CPUC at the time of submittal to the RWQCB and keep the CPUC updated through the RWQCB hearing process until Board approval of the waste discharge.					3. CalAm will provide the CPUC with a copy of the Report and will keep the CPUC updated on the RWQCB process	
BIOLOGICAL RESOURCES							
Impact 6.4-1: Construction and operation of the new facilities associated with the Regional Project may adversely affect species identified as rare, threatened, endangered, candidate,	**Mitigation Measure 4.4-1d:** ***Avoid direct Mortality and/or Disturbance of Special-Status Plant Populations.*** Floristic surveys of all suitable habitat for special-status plants shall be conducted prior to the biological permitting phase of the Project. Maps depicting the results of these surveys shall be prepared for use in final siting design. Sensitive plant species are widespread, and could occur at the following sites: North Marina, North Marina to Terminal Reservoir Corridor, Terminal Reservoir, Aquifer Storage and Recovery Facilities, and	X	X	X	X	1. CalAm will conduct or have conducted, focused surveys, complying with CDFG protocols 2. In the event that no special-status plants are present, CalAm will document findings in a letter to the appropriate agencies and the CPUC	1. Conduct surveys during design; if no special-status plants are found no further work is needed 2. Reports submitted to agencies are after surveys are done. 3. If necessary, during

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
sensitive, or other special status by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Monterey Pipeline. Project facilities shall be sited to avoid impacts on special-status plants and their required habitat constituent elements, when reasonably feasible. Unavoidable impacts on listed plants species, including Seaside bird's-beak, Yadon's wallflower, sand gilia, Monterey spineflower, and Yadon's rein orchid, require formal consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). Impacts on non-listed species would likely involve informal consultation. Special-status plant occurrences located within temporary construction areas shall be fenced or flagged for avoidance prior to construction, and a biological monitor shall be present to ensure compliance with off-limits areas. Seasonal avoidance measures (i.e.,					3. CalAm will incorporate results and recommendations of the surveys into contract specifications, as needed. 4. If special-status plants are present, CalAm consults with CDFG and or USFWS, complies with recommendations and develops compensation measures and a Site Restoration Plan (for off-site measures).	design, adjust siting of project elements to avoid special-status plants and incorporate protection measures in specifications. 4. If avoidance of special-status plants is not possible, implement measures to protect special-status plants before and during construction
BIOLOGICAL RESOURCES (cont.)							
Impact 6.4-1 (cont.)	limited operating periods based on timing of annual plant dormancy), combined with topsoil salvage and site restoration, may be acceptable in some cases. Compensation for permanent loss of special-status plant occurrences, in the form of land purchase or restoration, must be provided to the level acceptable to the resource agencies. Compensatory measures will be determined on a case-by-case basis by the project applicant in consultation with the USFWS and the CDFG. Compensation for loss of special-status plant populations typically involves the purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or off-site. In the latter case, a Site Restoration Plan shall be required, to be prepared by the Applicant and approved by the CPUC, USFWS, and the CDFG as					5. CalAm will implement compensation measures, and demonstrate compliance with the CPUC. CalAm will submit annual monitoring reports to resource agencies and the CPUC that include photo documentation, planting specifications, site layout map(s)	5. Compensatory mitigation, if needed, would be implemented before construction, if possible; site restoration activities will occur after construction. Reports filed annually.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	appropriate. It shall include the following: (1) The location of areas to restore lost plant populations; (2) A description of propagation and planting techniques to be employed in the restoration effort; plants to be impacted shall have their seeds collected so that the seeds can be planted within the restoration areas; (3) A time table for implementation of the restoration plan, including pilot-phase studies; (4) A monitoring plan and performance criteria (Performance criteria may vary across sites and species, but is intended to provide proof of restoration success. This is normally a majority of the plants surviving a minimum of five years.); (5) A description of remedial measures to be performed if initial restoration measures are unsuccessful in meeting the performance criteria; and,						
BIOLOGICAL RESOURCES (cont.)							
Impact 6.4-1 (cont.)	(6) A description of the site maintenance activities to follow restoration activities; these may include weed control, irrigation, and control of herbivory by livestock and wildlife. Site maintenance activities shall be altered or intensified when necessary to meet performance criteria.						
Impact 6.4-1: Construction and operation of the new facilities associated with the Regional Project may adversely affect species identified as rare, threatened, endangered, candidate,	**Mitigation Measure 4.4-1e:** ***Avoid Construction Impacts on Burrowing Owls.*** Burrowing owl habitat may occur at the following project locations: • Transmission Main South • ASR Facilities Preconstruction surveys for burrowing owls shall be completed in potential habitat in conformance with California Department of Fish and Game (CDFG) protocols, and no more than thirty days	X		X		1.CalAm will include in contract specifications the requirement that pre-construction surveys be conducted 2. CalAm will include in contract specifications the requirement for prescribed protective measures.	1. Surveys conducted no more than thirty days prior to the start of construction; if no owls are found, no further action is needed. 2. During design. 3. Prior to conclusion of construction.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
sensitive, or other special status by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	prior to the start of construction. If no burrowing owls are located during these surveys, no additional action would be warranted. However, if breeding or resident owls are located on or immediately adjacent to the site, the following mitigation measures shall be implemented. A 250-foot buffer, within which no new activity is permissible, shall be maintained between Project activities and nesting burrowing owls. This protected area shall remain in effect until August 31 or, at the discretion of the California Department of Fish and Game (CDFG) and based upon monitoring evidence, until the young owls are foraging independently. If construction will directly impact occupied burrows, eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFG authorizing the eviction. No burrowing owls shall be evicted from burrows during the nesting season (February 1 through August 31).					3. CalAm will document compliance with the CPUC.	
BIOLOGICAL RESOURCES (cont.)							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.4-1: Construction and operation of the new facilities associated with the Regional Project may adversely affect species identified as rare, threatened, endangered, candidate, sensitive, or other special status by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	**Mitigation Measure 4.4-1f:** ***Avoid Construction Impacts on Other Special-Status Birds.*** Special-Status birds (see Table 4.4-2 and *Other Special-Status Bird Species,* above) could occur on or near any of the sites not within developed areas. These bird species typically nest in California between March 1 and September 1. If construction-related work is scheduled outside of this nesting season, nesting birds will not be impacted and no further mitigation is necessary. If construction must occur during the breeding season (March 1 to September 1), a qualified ornithologist shall conduct preconstruction surveys no more than fifteen days prior to the initiation of disturbance wherever suitable habitat occurs for special-status birds. If active nests are found to be present within or adjacent to work sites during the breeding season, a construction-free buffer around the active nests shall be established. For raptors, this buffer is typically 250 feet; for other birds it may be as narrow as 20 feet. An ornithologist in consultation with the California Department of Fish and Game (CDFG) shall determine the width of this buffer. This buffer shall be maintained until nesting has been completed and the young have fledged.	X	X	X	X	1. CalAm will include in contract specifications the requirement that pre-construction surveys be conducted 2. If active nests are found, CalAm will include in contract specifications the requirement for establishing a construction-free buffer around active nests in consultation with CDFG 3. CalAm will document compliance with the CPUC	1. If construction must occur during the breeding season (March 1 to September 1), a qualified ornithologist shall conduct preconstruction surveys no more than fifteen days prior to the initiation of disturbance wherever suitable habitat occurs for special-status birds, if no nesting birds are found no further action is needed 2. Protection measures are implemented prior to construction 3. Prior to construction
Impact 6.4-2: Construction and operation of the new facilities associated with the Regional Project may adversely affect riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the California Department of Fish and Game or U.S. Fish and	**Mitigation Measure 4.4-2b:** ***Avoid construction Impacts on Sensitive Upland Habitats.*** Sensitive Upland Habitat, predominantly Central Maritime Chaparral, has been identified at the following project locations: • ASR Facilities and Terminal Reservoir • Transmission Main South Construction activities, facilities, and conveyance systems shall be sited in a manner that avoids sensitive upland habitats to the maximum extent feasible. Sensitive upland habitats shall be preserved where possible through facility siting within degraded or non-native vegetation. Sensitive areas shall be flagged for avoidance to minimize the possibility of inadvertent encroachment during construction. Construction staff shall be	X	X	X		1. CalAm will include in contract specifications the requirement for measures to protect sensitive upland habitat 2. CalAm will include in contract specifications the requirement for pre-construction surveys, and the flagging of avoidance areas as needed 3. CalAm will include in contract specifications the requirement that construction staff be trained to avoid sensitive	1. Measures, including restoration plans, are included in specifications during design 2. Surveys are conducted and avoidance areas flagged prior to the start of construction. 3,4. Protection measures are put in place before construction and implemented and monitored during construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Wildlife Service.	educated on the sensitive habitats located within and adjacent to the Project's footprint,					habitats	5. Restoration Plan is developed before construction.
BIOLOGICAL RESOURCES (cont.)							
6.4-2 (cont.)	and a biological monitor shall be present to ensure compliance with off-limits areas. When avoidance is not feasible during construction activities; sensitive upland habitats temporarily disturbed during construction activities shall be quantified and appropriate restoration strategies shall be set forth in a Habitat Restoration Plan which shall be developed in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and submitted to the California Public Utilities Commission (CPUC) and the resource agencies. The Plan shall include the following elements: specific location of restoration site, details on soil preparation, seed collection, planting, maintenance, and monitoring, and quantitative success criteria. At a minimum, temporarily disturbed areas shall be restored by the Applicant to the natural (preconstruction) conditions, which may include the following actions: salvage and stockpiling of topsoil from maritime chaparral, central dune scrub, and oak woodland; regrading of disturbed sites with salvaged topsoil; and revegetation with native, locally collected species. Where restoration is not feasible (i.e., the impact is permanent), the applicant shall purchase and/or preserve similar undisturbed habitat off-site, or restore nearby disturbed areas at a ratio to be determined by the USFWS, CDFG, and other responsible resource agencies with jurisdiction over the project area.					4. CalAm demonstrates to the CPUC that avoidance areas are monitored during construction. 5. CalAm demonstrates to the CPUC that restoration plans, if necessary, are developed in consultation with USFWS and CDFG. 6. CalAm implements restoration and demonstrates compliance to the CPUC	6. Restoration plan is completed and reported to the CPUC after construction.
Impact 6.4-5: Construction and operation of the new	**Mitigation Measure 4.4-5:** The project applicant shall perform a comprehensive survey to identify, measure, and map trees subject to County tree removal ordinances (oak trees greater	X	X	X	X	1. CalAm conducts or has conducted a tree survey.	1. Tree survey completed during design

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
facilities associated with the Regional Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	than 6 inches in diameter) and North County Area Plan and Carmel Valley Master Plan ordinances (all native trees greater than 6 inches in diameter), as well as landmark trees. Prior to the removal of protected trees, the project applicant shall obtain tree removal permits or approvals for lost native and landmark trees and arrange mitigation with appropriate public and resource agencies. The standards for tree					2. CalAm includes tree protection and tree replacement measures in contract specifications 3. CalAm secures the necessary permits	2.Tree protection measures incorporated in specifications during design 3. Permits acquired prior to tree removal
BIOLOGICAL RESOURCES (cont.)							
	replacement shall be stipulated in the tree permit reviewed and approved by the pertinent local agencies. For example, Monterey County Zoning Ordinance - Title 21 stipulates submittals including: • A site plan sufficient to identify and locate the trees to be removed, other trees, buildings, proposed buildings, and other improvements; • The purpose for the tree removal; • A description of the species, diameter two feet above ground level, estimated height, and general health of the trees to be removed. • A description of the method to be used in removing the tree(s); • A statement showing how trees not proposed for removal are to be protected during removal or construction; • Proposed visual impact mitigation measures the applicant intends to take (if appropriate). Size, location and species of replacement trees, if any, shall be indicated in the site plan.					4. CalAm implements mitigation consistent with permit conditions and demonstrates compliance to the CPUC	4. Any off-site mitigation acquired before construction and on-site restoration completed after construction.
GEOLOGY, SOILS AND SEISMICITY							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.5-1: Large earthquakes would be expected to damage the proposed facilities, impairing and/or disrupting their intended operations if not engineered to withstand such ground shaking.	**Mitigation Measure 4.5-1:** A California licensed geotechnical engineer or engineering geologist will conduct geotechnical investigations of all Project facilities and pipeline alignments prior to the final design and prepare recommendations applicable to foundation design, earthwork, backfill and site preparation prior to or during the project design phase. The investigations will specify seismic and geologic hazards including potential ground movements and co-seismic effects (including liquefaction). The recommendations of the geotechnical engineer will be incorporated into the design and specifications in accordance with California Geological Survey Special Publication 117 and shall be implemented by the construction contractor. The construction manager will conduct inspections and certify that all design criteria have been met in accordance with the California Building Code as well as applicable City and County ordinances.	X	X	X	X	1. CalAm conducts or has conducted, geotechnical investigations and design criteria are incorporated into construction specifications 2. CalAm conducts or has conducted, inspections to confirm design criteria have been met. 3. CalAm demonstrates compliance to the CPUC	1. During final design of project facilities 2. Inspections during and at the completion of construction. 3. Inspection reports filed with CPUC at conclusion of construction
GEOLOGY, SOILS AND SEISMICITY (cont.)							
Impact 6.5-2: Proposed pipelines and facilities could incur damage as a result of underlying soil properties (subsidence, high shrink-swell potential, and corrosivity).	**Mitigation Measure 4.5-2:** All project elements and pipeline facilities will comply with applicable policies and appropriate engineering investigation practices necessary to reduce the potential detrimental effects of expansive soils, and corrosivity. Appropriate geotechnical studies will be conducted by California licensed geotechnical engineers or engineering geologists using generally accepted and appropriate engineering techniques for determining the susceptibility of the sites to unstable, weak or corrosive soils in accordance with the most recent version of the California Building Code. A licensed geotechnical engineer or engineering geologist will prepare recommendations applicable to foundation design, earthwork, and site preparation prior to or during the project design phase. Recommendations will address mitigation of site-specific, adverse soil and bedrock conditions that could hinder development. Project engineers will implement the recommendations and incorporate them into project specifications. Geotechnical design and design criteria will comply with the most recent version of the	X	X	X	X	1. CalAm conducts or has conducted, geotechnical investigations and design criteria are incorporated into construction specifications 2. CalAm conducts or has conducted, inspections to confirm design criteria have been met. 3. CalAm demonstrates compliance to the CPUC	1. During final design of project facilities 2. Inspections during and at the completion of construction. 3. Inspection reports filed with CPUC at conclusion of construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	California Building Code (CBC) and applicable local construction and grading ordinances. Once appropriately designed and subsequently constructed, in accordance with local and state building code requirements, the resultant improvements will have the structural fortitude to withstand the potential hazards of expansive soils or corrosivity without significant damage.						
Impact 6.5-4: Potential injury and/or damage resulting from earthquake induced landslide.	**Mitigation Measure 4.5-4:** During the design phase for all project components that require ground-breaking activities, the project applicant will perform site-specific design-level geotechnical evaluations which will include slope stability conditions and provide recommendations to reduce and eliminate potential slope hazards, if any, in the final design and if necessary, throughout construction. For all pipelines located in landslide hazard areas, appropriate piping material with the ability to deform without rupture (e.g. ductile steel) will be used. For all other facilities a geotechnical evaluation will be conducted and the geotechnical evaluations will include detailed slope	X	X		X	1. CalAm conducts or has conducted, geotechnical investigations and design criteria are incorporated into construction specifications 2. Inspections are conducted to confirm design criteria have been met.	1. During final design of project facilities 2. Inspections during and at the completion of construction 3. Inspection reports filed with CPUC at conclusion of construction
GEOLOGY, SOILS AND SEISMICITY (cont.)							
Impact 6.5-4 (cont.)	stability evaluations, which could include a review of aerial photographs, field reconnaissance, soil testing, and slope stability modeling. Facilities design and construction will incorporate the slope stability recommendations contained in the geotechnical analysis conducted by California licensed geotechnical engineers or engineering geologists. Final slope stabilization measures, determined by the licensed geotechnical engineer or engineering geologist in accordance with California Building Code requirements, may include, without limitation, one or more of the following: • Appropriate slope inclination (not steeper than 2 horizontal to 1 vertical) • Slope terracing • Fill compaction					3. CalAm demonstrates compliance to the CPUC.	

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	• Soil reinforcement • Surface and subsurface drainage facilities • Engineered retaining walls • Buttresses • Erosion control measures Mitigation measures included in the geotechnical report will be incorporated into the project construction specifications and become part of the project.						
Impact 6.5-5: Potential facility damage resulting from a major earthquake in areas susceptible to liquefaction.	**Mitigation Measure 4.5-1**	X	X	X	X	See above under Mitigation Measure 4.5-1	
HAZARDS AND HAZARDOUS MATERIALS							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials that may be present in excavated soil or groundwater.	**Mitigation Measure 4.6-1a:** Within one year prior to construction of facilities requiring excavation of more than 50 cubic yards of soil, the contractor shall retain a qualified environmental professional to conduct a Phase I Environmental Site Assessment in conformance with ASTM Standard 1527-05 to evaluate subsurface conditions that could be expected during construction. For all pipeline alignments, including Transmission Main South and the Monterey Pipeline, the contractor shall retain a qualified environmental professional to update the environmental database review to identify environmental cases, permitted hazardous materials uses, and spill sites within one-quarter mile of the pipeline alignment. Regulatory agency files will be reviewed for those sites that could potentially affect soil and groundwater quality within the project alignment. If these preliminary environmental reviews indicate that a release of hazardous materials could have affected soil or groundwater quality at a project site, the contractor shall retain a qualified environmental professional to conduct a Phase II environmental site assessment to evaluate the presence and extent of contamination at the site, in conformance with state and local guidelines and regulations. If the results of the subsurface investigation(s) indicate the presence of hazardous materials, additional site remediation may be required by the applicable state or local regulatory agencies, and the contractors shall be required to comply with all regulatory requirements for facility design or site remediation. In addition, the environmental professional will perform a site reconnaissance and assess the need for Phase II soil sampling at locations with the potential to have subsurface contamination identified in the RBF Hazardous Materials Assessment (2005). These locations may not be identified through a regulatory agency database search, and include stained soil near the aboveground petroleum pipeline at the plant site, the railroad right-of-way, and near Highway 1. As above, pertinent findings shall be reported to the applicable state or local regulatory agencies and additional remediation may be required based on the findings of these investigations.	X	X	X	X	1. CalAm conducts or has conducted, a Phase I Environmental Site Assessment 2. If necessary based on results of the Phase 1 environmental site assessment, CalAm will conduct or have conducted a Phase II Environmental Site Assessment. 3. If necessary, CalAm will include site remediation plans into contract specifications, and remediation shall be conducted in accordance with regulatory requirements. 4. CalAm demonstrates compliance to the CPUC.	1. Within one year prior to construction of facilities requiring excavation of more than 50 cubic yards of soil. 2,3,4. Before the start of construction.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
HAZARDS AND HAZARDOUS MATERIALS (cont.)							
Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials that may be present in excavated soil or groundwater.	**Mitigation Measure 4.6-1b:** Based on the findings of the environmental review required by Mitigation Measure 4.6-1a, the project applicant shall prepare a project-specific Health and Safety Plan (HSP) in accordance with 29 CFR 1910 to protect construction workers and the public during all excavation, grading and construction activities. This plan shall be submitted to the CPUC for review. The HSP shall identify the following, but not be limited to: • A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals; • Specified personal protective equipment and decontamination procedures, if needed; • Safety procedures to be followed in the event suspected hazardous materials are encountered; • Emergency procedures, including route to the nearest hospital; • The identification of a site health and safety officer and responsibilities of the site health and safety officer	X	X	X	X	1. CalAm prepares or has prepared, a project-specific Health and Safety Plan (HSP) in accordance with 29 CFR 1910. 2. CalAm provides the HSP to the CPUC 3. CalAm demonstrates implementation of the HSP.	1,2. Prior to excavation, grading, trenching, or cut and fill operations. 3. During applicable construction activities
Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials	**Mitigation Measure 4.6-1c:** The contractor shall have a site health and safety supervisor fully trained pursuant to the HAZWOPER standard (29 CFR 1910.120) be present during excavation, grading, trenching, or cut and fill operations to monitor for evidence of potential soil contamination, including soil staining, noxious odors, debris or buried storage containers. The site health and safety supervisor must be	X	X	X	X	1. CalAm will include in contract specifications, the requirement that a site health and safety supervisor trained pursuant to HAZWOPER standards be present during excavation, grading, trenching, or cut and	1. During final design. 2. During construction and following any incident.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
that may be present in excavated soil or groundwater.	capable of evaluating whether hazardous materials encountered constitute an incidental release[181] of a hazardous substance or an emergency spill. The site health and safety supervisor shall direct procedures to be followed in the event					fill operations. 2. CalAm will demonstrate compliance to the CPUC and that	
HAZARDS AND HAZARDOUS MATERIALS (cont.)							
Impact 6.6-1 (cont.)	that a hazardous materials release with the potential to impact worker health and safety is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, notifying Monterey County Department of Environmental Health, and retaining a qualified environmental firm to perform sampling and remediation.					appropriate procedures were followed in the event of an incidental release.	
Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials that may be present in	**Mitigation Measure 4.6-1d:** The applicant and its contractor shall coordinate with each property owner at the time of construction and obtain a legal Right of Entry. The contractor shall comply with all provisions established in that agreement and all regulations regarding excavation, digging, and development within the former Fort Ord.	X	X	X	X	1. CalAm will obtain or have obtained, a legal Right of Entry for all properties requiring access 2. CalAm will include in contract specifications, any provisions established in Rights of Entry	1,2. During final design.

[181] An incidental release is a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a short time frame. Incidental releases are limited in quantity, exposure potential, or toxicity and present minor safety and health hazards to employees in the immediate work area or those assigned to clean them up.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
excavated soil or groundwater.						and any and all regulations regarding excavation within the former Fort Ord	
Impact 6.6-1: Excavation and grading for the project could expose construction workers, the public, or the environment to hazardous materials that may be present in excavated soil or groundwater.	**Mitigation Measure 4.6-1e:** The applicant or its contractor shall develop a materials disposal plan specifying how the applicant or its contractor will remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner. The plan must identify the disposal method for soil and the approved disposal site, and include written documentation that the disposal site will accept the waste. This plan shall be submitted to the CPUC for review and approval. The applicant or its contractor shall develop a groundwater dewatering control and disposal plan specifying how the applicant or its contractor will remove, handle, and dispose of groundwater impacted by hazardous substances in a safe, appropriate and lawful manner. The plan must identify the locations at which potential groundwater impacts are likely to be encountered (based on the	X	X	X	X	1. CalAm shall develop or have developed a Materials Disposal Plan and a Groundwater Dewatering Control and Disposal Plan for review and approval by the CPUC. 2. CPUC signs off on the Plan. 3. CalAm will file reports annually with the CPUC that document compliance with the Plans, and that soil and groundwater have been disposed of appropriately.	1,2. Prior to the start of construction. 3. During construction.
HAZARDS AND HAZARDOUS MATERIALS (cont.)							
Impact 6.6-1 (cont.)	results of Mitigation Measure 4.6-1a), the method to analyze groundwater for hazardous materials, and the appropriate treatment and/or disposal methods. This plan shall be submitted to the CPUC for review and approval.						
TRAFFIC							
Impact 6.7-1: Short-term increases in vehicle trips by construction workers and construction vehicles on area roadways.	**Mitigation Measure 4.7-1:** The following requirements will be incorporated into contract specifications for the project: • The contractor(s) will obtain any necessary road encroachment permits prior to construction of each project component and will comply with conditions of approval attached to project implementation. As part of the road encroachment permit process, the contractor(s) will	X	X	X	X	1. CalAm will prepare or have prepared a Traffic Control and Safety Assurance Plan for submittal, review and approval by the County and appropriate municipal public works departments.	1. During final design 2,3,4. Before start of construction 5. Annually during construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	prepare a Traffic Control and Safety Assurance Plan in accordance with professional engineering standards and submit the plan (for work in the public right-of-way) to the agencies with jurisdiction over the affected roads, as well as the CPUC, for review and approval. The specific plan will be developed on the basis of detailed design plans for the approved project, but elements of the plan will include, but are not necessarily limited to, the following: – Develop circulation and detour plans to minimize impacts to local street circulation. This could include the use of haul routes that maximize truck traffic on arterials and other major roads (which conversely limits the use of local roadways to the extent possible), and the use of signing and flaggers to guide vehicles through the construction zone. – Control and monitor construction vehicle movements through the enforcement of standard construction specifications by periodic onsite inspections. – Install traffic control devices where traffic conditions warrant, as specified in applicable jurisdiction's standards (e.g., the Caltrans *Manual of Traffic Controls for Construction and Maintenance Work Zones*).					2. CalAm shall submit the approved Plan to the CPUC. 3. CalAm shall include the Plan in contract specifications. 4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC. 5. CalAm will document to the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	
TRAFFIC (cont.)							
Impact 6.7-1 (cont.)	– Schedule truck trips outside of peak AM and PM peak commute hours to the extent feasible, and as needed to avoid adverse impacts on traffic flow (i.e., if agencies with jurisdiction over the affected roads identify highly congested traffic flow during their review of the encroachment permit applications). The frequency of truck trips (loaded or empty) shall be no greater than one every two minutes during the peak AM and PM peak commute hours. – Post advanced warning signs of construction activities to allow motorists to select alternative routes.						

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	– Arrange a telephone number with knowledgeable personnel to address public questions and complaints during project construction. – Store all equipment and materials in designated contractor staging areas on or close to the worksite, in such a manner to minimize obstruction to traffic.						
Impact 6.7-2: Reduction in the number of, or the available width of, travel lanes on roads where pipeline construction would occur, resulting in short-term traffic delays for vehicles traveling past the construction zones.	**Mitigation Measure 4.7-2:** The following elements shall be included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1: • Where possible, limit the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone. • If alternate one-way traffic flow cannot be maintained past the construction zone, install detour signs on alternative routes around the closed road segment. • Publish notices of the location(s) and timing of road closures in local newspapers, and on available web sites, to allow motorists to select alternative routes. • Limit lane closures during peak hours to the extent possible. • Restore roads and streets to normal operation by covering trenches with steel plates outside of allowed working hours or when work is not in progress.	X	X	X	X	1. CalAm shall include or have the required elements included in the Traffic Control and Safety Assurance Plan (see Mitigation Measure 4.7-1). 2. CalAm shall submit the approved Plan to the CPUC. 3. CalAm shall include the Plan in contract specifications. 4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC. 5. CalAm will document to the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	1. During final design 2,3,4. Before start of construction 5. Annually during construction
TRAFFIC (cont.)							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord Terminal Reservoir	ASR	Monterey Pipeline		Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.7-3: Demand for parking spaces to accommodate construction worker vehicles.	**Mitigation Measure 4.7-3:** The following element shall by included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1: • Identify locations that provide sufficient parking capacity to accommodate parking demand by construction workers (within the construction zone or, if needed, at a nearby location with transport [e.g. shuttle vans] provided between the parking location and the worksite).	X	X	X	X	1. CalAm shall include or have the required element included in the Traffic Control and Safety Assurance Plan (see Mitigation Measure 4.7-1) 2. CalAm shall submit the approved Plan to the CPUC 3. CalAm shall include the Plan in contract specifications. 4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC 5. CalAm will document to the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	1. During final design 2,3,4. Before start of construction 5. Annually during construction
Impact 6.7-4: Potential traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways.	**Mitigation Measure 4.7-4:** The following elements shall by included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1: • Comply with roadside safety protocols to reduce the risk of accidents. Provide "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. Construction personnel shall be trained to apply appropriate safety measures as described in the plan. • To the extent feasible, perform construction that crosses on-street and off-street bikeways (and sidewalks and pathways for pedestrians) in a manner that allows for safe access for	X	X	X	X	1. CalAm shall include or have the required elements included in the Traffic Control and Safety Assurance Plan (see Mitigation Measure 4.7-1) 2. CalAm shall submit the approved Plan to the CPUC 3. CalAm shall include the Plan in contract specifications. 4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC	1. During final design 2,3,4. Before start of construction 5. Annually during construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
TRAFFIC (cont.)							
Impact 6.7-4 (cont.)	bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.					5. CalAm will annually document for the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	
Impact 6.7-5: Access disruption to adjacent land uses and streets for both general traffic and emergency vehicles.	**Mitigation Measure 4.7-5:** The following elements shall by included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1: • Maintain access for emergency vehicles at all times. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. Provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways. • Provide flaggers in school areas at the start and end of the school day if and when pipeline installation would occur at designated school zones. • Maintain access for private driveways to the maximum extent feasible.	X	X	X	X	1. CalAm shall include or have the required elements included in the Traffic Control and Safety Assurance Plan (see Mitigation Measure 4.7-1) 2. CalAm shall submit the approved Plan to the CPUC 3. CalAm shall include the Plan in contract specifications. 4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC 5. CalAm will document to the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	1. During final design 2,3,4. Before start of construction 5. Annually during construction
Impact 6.7-6: Disruptions to transit and railroad service on pipeline alignment routes.	**Mitigation Measure 4.7-6:** The following elements shall by included in the Traffic Control and Safety Assurance Plan prepared in compliance with Mitigation Measure 4.7-1: • Coordinate with Monterey-Salinas Transit so the transit provider can temporarily relocate bus routes or bus stops in work zones as it deems necessary. • Provide advance notification to UPRR of the timing, location, and duration of construction activities that could	X	X	X	X	1. CalAm shall include or have the required elements included in the Traffic Control and Safety Assurance Plan (see Mitigation Measure 4.7-1) 2. CalAm shall submit the approved Plan to the CPUC	1. During final design 2,3,4. Before start of construction 5. Annually during construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	affect the					3. CalAm shall include the Plan in contract specifications.	
TRAFFIC (cont.)							
Impact 6.7-6 (cont.)	movement of trains on the tracks between Dolan Road and SR 156.					4. CalAm will obtain any necessary road encroachment permits and provide copies to the CPUC 5. CalAm will document to the CPUC that the Traffic Control and Safety Assurance Plan has been implemented.	
Impact 6.7-7: Increased wear-and-tear on the designated haul routes used by construction vehicles.	**Mitigation Measure 4.7-7:** Prior to construction of project components, the applicant and the affected jurisdiction(s) shall enter into an agreement that will detail the pre-construction conditions for all routes that will be used by project-related vehicles, and the post-construction requirements of the rehabilitation program. Roads damaged by project construction will be repaired to a structural condition equal to that which existed prior to construction activity.	X	X	X	X	1. CalAm shall coordinate and enter into agreements with the County and applicable municipal public works departments regarding the conditions of existing roadways to be used by project-related vehicles, and develop a plan for post construction rehabilitation. 2. CalAm will submit the agreements to the CPUC 3. CalAm will document and provide to the CPUC evidence that the terms of the agreements have been met and roads have been repaired as per the agreements.	1,2. Prior to construction of any project component 3. After construction
AIR QUALITY							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
Impact 6.8-1: Regional Project construction activities would generate emissions of criteria pollutants, including fugitive dust and equipment exhaust particulate matter.	**Mitigation Measure 4.8-1a:** ***Construction Fugitive Dust Control Plan.*** Project applicant shall require its construction contractor(s) to implement a dust control plan that shall include a minimum of the following dust control measures: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, or water twice daily exposed stockpiles (dirt, sand, etc.) • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. • Post a publically visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the Monterey Bay Unified Air Pollution Control District shall also be visible to ensure compliance with District rules. • Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the ASR well facilities and the Terminal Reservoir/ASR pump station sites.	X	X	X	X	1. CalAm will include the development and implementation of a Dust Control Plan in contract specifications. 2. CalAm will file a copy of the Dust Control Plan with CPUC. 3. CalAm will document implementation of the Dust Control Plan to the CPUC	1,2. Prior to construction or any groundbreaking activities 3. During construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
AIR QUALITY (cont.)							
Impact 6.8-1: Regional Project construction activities would generate emissions of criteria pollutants, including fugitive dust and equipment exhaust particulate matter.	**Mitigation Measure 4.8-1b: *Stabilize Dust on Access Roads*.** Project applicant(s) shall require its construction contractor(s) to apply a soil stabilizer, gravel, or pave the construction access roads to the Regional Desalination Plant and the Terminal Reservoir sites. These access roads shall be stabilized prior to the commencement of construction activities at these sites.		X			1. CalAm includes in contract specifications the requirement for its construction contractor(s) to apply a soil stabilizer, gravel, or pave the construction access roads. 2.CalAm provides the CPUC with documentation of implementation.	1,2. Prior to the commencement of construction activities at these sites
Impact 6.8-1: Regional Project construction activities would generate emissions of criteria pollutants, including fugitive dust and equipment exhaust particulate matter.	**Mitigation Measure 4.8-1c: *Idling Restrictions*.** On road vehicle idling time shall be minimized and shall not exceed a five minute maximum. Additionally, off road engines will not idle for longer than five minutes per Section 2449(d)(3) of Title 13, Article 4.8, Chapter 9 of the California Code of Regulations. To enforce this measure project applicant(s) shall ensure that all construction workers are aware of vehicle idling restrictions.	X	X	X	X	1. CalAm includes in contract specifications the requirement for its construction contractor(s) to enforce a vehicle idling time of five minute maximum. 2. CalAm provides the CPUC with documentation of implementation	1,2. Prior to commencement of construction
Impact 6.8-3: Construction activities associated with Phase 1 and Phase 2 of the Regional Project would generate a cumulatively considerable net increase of PM_{10}.	**Mitigation Measures 4.8-1a through 4.8-1c**	See above under Mitigation Measures 4.8-1a through 4.8-1c					
Impact 6.8-5: Conflict with the State goal of reducing greenhouse gas emission in California to 1990 levels by 2020, as set forth by	**Mitigation Measure 4.8-1c.**	See mitigation measure 4.8-1c				See mitigation measure 4.8-1c	

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
AB 32, California Global Warming Solutions Act of 2006.							
AIR QUALITY (cont.)							
Impact 6.8-5: Conflict with the State goal of reducing greenhouse gas emission in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006.	**Mitigation Measures 4.8-5a:** ***Aerodynamic Efficiency for Trucks.*** Trucks and trailers that would be used after year 2013 to haul equipment and materials to construction sites associated with the project would be required to be retrofitted with the best available aerodynamic efficiency technology and/or CARB approved aerodynamic efficiency technology to reduce greenhouse gas emissions and improve fuel efficiency by reducing aerodynamic drag and rolling resistance pursuant to CARB's Climate Change Scoping Plan Discrete Early Action T-7.	X	X	X	X	1. CalAm will include in contract specifications the requirement that trucks used for construction after 2013 will be equipped with aerodynamic efficiency technology 2. CalAm provides the CPUC with documentation of implementation.	1. During final design 2. Annually during construction
Impact 6.8-5: Conflict with the State goal of reducing greenhouse gas emission in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006.	**Mitigation Measure 4.8-5d:** ***Energy Minimization and greenhouse gas Reduction Plan.*** CalAm shall develop and implement an Energy Minimization and Greenhouse Gas Reduction Plan to reduce the carbon footprint of the CalAm Facilities (primarily associated with pumping of water for the ASR Facilities and the Terminal Reservoir) to the extent feasible. At minimum, the plan shall require the installation of energy efficient equipment and use of renewable energy sources. All emission reductions that would be associated with efficiency measures shall be substantiated in the plan. The plan shall be reviewed and approved by the CPUC prior to the commencement of project operations.		X	X		1. CalAm will develop or have developed an Energy Minimization and greenhouse gas Reduction Plan. 2.CalAm will include in contract specifications the requirement for implementation of the Plan 3. CalAm will provide the Plan to the CPUC for review and approval 4. CalAm will demonstrate implementation to the CPUC	1,2,3. Prior to construction 4. Annually during construction
NOISE AND VIBRATION							
Impact 6.9-1: Construction activity would violate standards established in the local	**Mitigation Measure 4.9-1a:** The contractor shall locate all stationary noise-generating equipment as far as possible from nearby noise-sensitive receptors. Contractor specifications shall include a requirement that drill rigs located within 500 feet			X		1. CalAm includes in contract specifications the requirements that all stationary noise-generating equipment be	1. Prior to construction 2. During and following construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	of noise-sensitive receptors shall be equipped with noise reducing engine housings or other noise reducing technology such that drill rig noise levels are no more 85 dBA at 50 feet, and the line of sight between the drill rig and nearby sensitive receptors shall be blocked by portable acoustic barriers and/or shields to reduce noise levels by at least an additional 10 dBA. For nighttime drilling activities within 500 feet of residences, the drill rig sites shall be equipped with noise					located away from sensitive receptors, and the listed noise metrics be met. 2. CalAm demonstrates compliance to the CPUC.	
NOISE AND VIBRATION (cont.)							
Impact 6.9-1 (cont.)	control blankets designed to achieve a Sound Transmission Class (STC) rating of 25 or more so that noise levels 50 feet from the drilling site would be no more 60 dBA.						
Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	**Mitigation Measure 4.9-1b:** The construction contractor shall limit all non-ASR well development construction related activities to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between 9:00 a.m. and 7:00 p.m. Saturdays, or as agreed upon by the local jurisdiction.	X	X	X	X	1. CalAm will include restrictions on construction hours in contract specifications. 2. CalAm will demonstrate compliance to the CPUC.	1. Prior to construction 2. During construction.
Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	**Mitigation Measure 4.9-1c:** The contractor shall assure that construction equipment with internal combustion engines have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an un-muffled exhaust.	X	X	X	X	1. CalAm will include requirements for noise controls in contract specifications 2. CalAm will demonstrate compliance to the CPUC	1. Prior to construction 2. During construction
Impact 6.9-1: Construction activity would violate standards	**Mitigation Measure 4.9-1d:** Residents and other sensitive receptors within 500 feet of a construction area shall be notified of the construction schedule in writing, at least two weeks prior	X	X	X	X	1. CalAm includes requirements for notification in contract specifications,	1. Prior to construction 2. At least two weeks prior

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	to the commencement of construction activities. The project applicant or the contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and included in the construction schedule notification sent to nearby residents. The notice to be distributed to residents and sensitive receptors within the City of Seaside shall first be submitted to the City of Seaside Planning and Services Manager for review and approval.					(including the need for approval of the notice by the City of Seaside) 2. CalAm confirms notification has been provided and documents compliance with the CPUC. 3. CalAm confirms a noise disturbance coordinator is assigned and phone number is posted, and documents compliance to the CPUC.	to start of construction activities. 3. During construction
NOISE AND VIBRATION (cont.)							
Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	**Mitigation Measure 4.9-1e:** The ASR well development construction contractor shall provide the CPUC with documentation that it has obtained approval from a City of Seaside Building Official to conduct night-time well development construction activities. In addition, the Applicant shall submit to the CPUC and the City of Seaside Planning Services Manager an ASR Well Construction Noise Control Plan for review and approval. The plan shall identify all feasible noise control procedures that would be implemented during night-time construction activities. At a minimum, the plan shall require implementation of Mitigation Measures 4.9-1a through 4.9-1d, and the construction contractor shall ensure that noise blankets, or equivalent sound attenuation devices, are used to attenuate stationary drill equipment noise during ASR well development activities that take place during nighttime hours (as defined by City of Seaside Municipal Code). The plan shall specify that only well development construction equipment that is absolutely required shall be allowed to operate during the nighttime hours.			X		1 CalAm will submit an ASR Well Construction Noise Plan to the City of Seaside and the CPUC for review and approval. 2. CalAm or its contractor will obtain approval from a City of Seaside to conduct night-time well development construction activities and provide documentation of approval to the CPUC.	1,2. Prior to construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	**Mitigation Measure 4.9-1f:** If the ASR well facilities are constructed adjacent to Roger S. Fitch Middle School, construction activities shall take place while classes are not in session.			X		1. CalAm will include in contract specifications the requirement that ASR well facilities located adjacent to Roger S. Fitch Middle School will require construction activities to take place while classes are not in session. 2. CalAm will document compliance to the CPUC	1. Prior to construction 2. During construction
Impact 6.9-1: Construction activity would violate standards established in the local general plans or noise ordinances, and/or would adversely affect nearby sensitive receptors.	**Mitigation Measure 4.9-1g:** Temporary hotel accommodations shall be provided by the project applicant to all residents located within 50 feet of a designated construction area where construction activity would occur on a 24-hour continuous basis. The accommodations shall be provided for the duration of the 24-hour construction activities.			X		1. CalAm will provide temporary hotel accommodations to residents located within 50 feet of a 24-hour construction site. 2. CalAm will document compliance to the CPUC	1. During construction 2. After construction
NOISE AND VIBRATION (cont.)							
Impact 6.9-2: Operation of the proposed desalination plant and other conveyance facilities would potentially increase existing noise levels, which could exceed noise level standards and/or result in nuisance impacts.	**Mitigation Measure 4.9-2:** All stationary noise sources (e.g., pump stations, permanent and emergency power generators, variable frequency drive motors, well heads with motors, etc.) shall be located within enclosed structures with adequate setback and screening, as necessary, to achieve acceptable regulatory noise standards for industrial uses as well as to achieve acceptable levels at the property lines of nearby residences, as determine by the applicable local jurisdiction. Noise enclosures shall be designed to reduce equipment noise levels by at least 20 dBA. Once the stationary noise sources have been installed, noise levels shall be monitored to ensure compliance with local noise standards. If project stationary noise sources exceed the applicable noise standards, an acoustical	X	X	X	X	1. CalAm will design or have stationary noise sources designed to be housed in enclosed structures. 2. CalAm will have noise levels at the stationary source locations monitored to ensure compliance with 20dBA reduction. 3. CalAm will have additional noise attenuation features implemented if needed.	1. During design. 2. After installation of enclosures. 3,4. Before start of full scale operations.

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	engineer shall be retained by the project applicant to install additional noise attenuation measures in order to meet the applicable noise standards.					4. CalAm will file results of monitoring reports and demonstrate compliance to the CPUC.	
Impact 6.9-3: Short-term construction within the Project area would result in temporary vibration impacts on nearby sensitive receptors and structures.	**Mitigation Measures 4.9-1b and 4.9-1d**	See above under Mitigation Measures 4.9-1b through 4.9-1d					
LAND USE, AGRICULTURE AND RECREATION							
Impact 6.10-1: Components of the Phase 1 Project and Phase 2 Project may permanently divide or temporarily disrupt an established community.	**Mitigation Measure 4.10-1a:** Implement the Traffic Control and Safety Assurance Plan elements recommended in Mitigation Measure 4.7-1 to develop detours during construction activities to allow traffic, pedestrian, and service flow within and among existing communities.	X	X	X	X	See above under Mitigation Measures 4.7.1	
LAND USE, AGRICULTURE AND RECREATION (cont.)							
Impact 6.10-1: Components of the Phase 1 Project and Phase 2 Project may permanently divide or temporarily disrupt an established community.	**Mitigation Measure 4.10-1b:** Implement the Traffic Control and Safety Assurance Plan elements recommended in Mitigation Measure 4.7-4 to carry out construction activities in a manner that allows access along bike routes and pedestrian pathways to ensure safe access for pedestrians and bicyclists. During construction, the project applicant shall implement detours adjacent to the existing bike paths, sidewalks, and hiking trails that will be affected by construction in order to maintain access to and along paths.	X	X	X	X	See above under Mitigation Measures 4.7.1	
Impact 6.10-1: Components of the	**Mitigation Measure 4.10-1c:** Disturbed areas shall be restored after construction through repaving roads and	X	X	X	X	1. CalAm will include in contract specifications the requirement	1. Prior to construction 2. At completion of

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Phase 1 Project and Phase 2 Project may permanently divide or temporarily disrupt an established community.	sidewalks, replacing uncontaminated soil that was been removed, and replanting areas where vegetation was removed with the same or comparable species.					for restoration of disturbed areas 2. CalAm demonstrates compliance to the CPUC.	construction
PUBLIC SERVICES AND UTILITIES							
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1a:** Prior to excavation, the project applicant or its contractor will locate overhead and underground utility lines, such as natural gas, electricity, sewage, telephone, fuel, and water lines, that may reasonably be expected to be encountered during excavation work.	X	X	X	X	1. CalAm will include in contract specifications the requirement that overhead and underground utilities near the work sites be located. 2. CalAm demonstrates compliance to the CPUC	1. Prior to construction 2. Before the start of any excavation
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1b:** The project applicant or its contractors will find the exact location of underground utilities by safe and acceptable means, including the use of hand and modern techniques as well as customary types of equipment. Pursuant to state law the project applicant or its contractor shall notify Utilities Service Alert (USA). Information regarding the size, color, and location of existing utilities must be confirmed before construction activities begin. Detailed specifications shall be prepared as part of	X	X	X	X	1. CalAm demonstrates to the CPUC that the size, color and location of underground utilities have been determined and are reported to the USA. 2. CalAm will include in contract specifications detailed procedures for the excavation, support, and fill	1. Before the start of any excavation 2. During final design 3. Prior to construction
PUBLIC SERVICES AND UTILITIES (cont.)							
Impact 6.11-1 (cont.)	the design plans to include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utility services shall be notified of construction plans and schedule. Arrangements shall be made with these entities regarding protection, relocation, or temporary disconnection of services.					of areas around utility cables and pipes. 3. CalAm demonstrates to the CPUC that affected utilities have been notified, and coordination has occurred as needed.	

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1c:** The project applicant shall comply with all conditions of its utility excavation or encroachment permits and shall include such conditions in construction contract specifications.	X	X	X	X	1. CalAm will include in contract specifications requirements to comply with conditions of its utility excavation or encroachment permits 2. CalAm demonstrates compliance to the CPUC	1. During final design 2. Prior to excavation activities
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1d:** The project applicant or its contractors will confirm the specific location of all high priority utilities (i.e. pipelines carrying petroleum products, oxygen, chlorine, toxic or flammable gases; natural gas in pipelines greater than 6 inches in diameter, or with normal operating measures, greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts that do not have effectively grounded sheaths) and such locations will be highlighted on all construction drawings. In the contract specifications, the project applicant will require that the contractor provide weekly updates on planned excavation for the upcoming week and identify when construction will occur near a high priority utility. On days when this work will occur, the project applicant's construction managers will attend tailgate meetings with contractor staff to review all measures—those identified in the Mitigation Monitoring and Reporting Program and in the construction specifications—regarding such excavations. The contractor's designated health and safety officer will specify a safe distance to work near high-pressure gas lines, and excavation	X	X	X	X	1. CalAm will demonstrate to the CPUC that specific locations of high-priority utilities are included in construction drawings 2. CalAm will demonstrate to the CPUC that the requirement for weekly updates and tailgate safety meetings are included in contract specifications and have been complied with. 3. CalAm will demonstrate to the CPUC that safety requirements are being followed.	1,2,3.Prior to, during and after excavation activities
PUBLIC SERVICES AND UTILITIES (cont.)							
Impact 6.11-1 (cont.)	closer to the pipeline will not be authorized until the designated health and safety officer confirms and documents in the construction records that: (1) the line was appropriately located in the field by the utility owner using as-built drawings and a						

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	pipeline-locating device, and (2) the location was verified by hand by the construction contractor. The designated health and safety officer will provide written confirmation to the project applicant that the line has been adequately located, and excavation will not start until this confirmation has been received by the project applicant.						
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1e:** While any excavation is open, the project applicant or its contractors will protect, support, or remove underground utilities as necessary to safeguard employees.	X	X	X	X	1. CalAm will include in contract specifications the requirement that underground utilities in open excavations are managed to safeguard employees. 2. CalAm will demonstrate compliance to the CPUC.	1. Prior to construction 2. During construction
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1f:** The project applicant or its contractors will notify local fire departments any time damage to a gas utility results in a leak or suspected leak, or whenever damage to any utility results in a threat to public safety.	X	X	X	X	1. CalAm will include in contract specifications the requirement for leak notification. 2. CalAm will demonstrate compliance to the CPUC	1. Prior to construction 2. During construction, if any leak occurs or is suspected
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1g:** The project applicant or its contractors shall contact utility owner if any damage occurs as a result of the project and promptly reconnect disconnected cables and lines with approval of owner.	X	X	X	X	1. CalAm will include in contract specifications the requirement for utility notification if any damage occurs and prompt reconnection of disconnected cables and lines 2. CalAm will demonstrate compliance to the CPUC	1. During final design 2. During construction, if any damage occurs
PUBLIC SERVICES AND UTILITIES (cont.)							
Impact 6.11-1: Potential damage to or interference with	**Mitigation Measure 4.11-1h:** The project applicant shall observe Department of Health Services (DHS) standards, which require: (1) a 10-foot horizontal separation between	X	X	X	X	1. CalAm will include in contract specifications the requirements for compliance with DHS	1. During final design 2. During construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
existing public utilities.	parallel sewage and water mains (gravity or force mains); (2) a 1-foot vertical separation between perpendicular water and sewage line crossings; and (3) encasement of sewage mains in protective sleeves where a new water line crosses under or over an existing wastewater main.					separation standards. 2. CalAm will demonstrate compliance to the CPUC	
Impact 6.11-1: Potential damage to or interference with existing public utilities.	**Mitigation Measure 4.11-1i:** The project applicant or its contractors shall coordinate final construction plans and specifications with affected utilities, such as PG&E. If any interruption of service is required, the project applicant or its contractors shall notify residents and businesses in the project corridor of any planned utility service disruption two to four days in advance, in conformance with County and State standards.	X	X	X	X	1. CalAm will include in contract specifications the requirement for coordination with utilities in the preparation of plans and specifications. 2. CalAm will include in contract specifications the requirement for notification of residents and businesses in the event of possible utility interruption 3. CalAm will demonstrate compliance to the CPUC	1,2. During final design 3. During construction
Impact 6.11-2: Potential short-term increase in demand for police, fire, or emergency services.	**Mitigation Measure 4.7-1 and Measures 4.11-1a through 4.11-1i**	X	X	X	X	See Mitigation Measures 4.7-1 and Measure 4.11-1a through 4.11-1i above for applicable monitoring and reporting actions.	
Impact 6.11-3: Potential adverse effects on solid waste landfill capacity and/or failure to achieve state-mandated solid waste diversion rates.	**Mitigation Measure 4.11-3a:** The project applicant shall encourage project facility design and construction methods that produce less waste, or that produce waste that could more readily be recycled or reused.	X	X	X	X	1. CalAm will include in contract specifications the requirement that facilities and construction methods are designed to minimize waste 2. CalAm will demonstrate compliance to the CPUC	1. During final design 2. During construction
PUBLIC SERVICES AND UTILITIES (cont.)							
Impact 6.11-3: Potential	**Mitigation Measure 4.11-3b:** The project applicant shall	X	X	X	X	1. CalAm will include in contract	1. During final design

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	**Monitoring and Reporting Actions:** ***CalAm Reports On, and the CPUC Monitors all Mitigation Measures***	**Implementation Schedule**
adverse effects on solid waste landfill capacity and/or failure to achieve state-mandated solid waste diversion rates.	include in its construction specifications a requirement for the contractors to describe plans for recovering, reusing, and recycling wastes produced through construction, demolition, and excavation activities.					specifications the requirement that the contractors prepare a waste minimization plan 2. CalAm will file a copy of the waste minimization plan with the CPUC	2. During construction
AESTHETICS RESOURCES							
Impact 6.12-2: Permanent facilities could have an adverse effect on scenic vistas, damage scenic resources, or degrade the existing visual character or quality of the site and its surroundings.	**Mitigation Measure 4.12-2a:** The applicant shall implement architectural features into the facility design so they complement the building styles of the community (e.g. nautical or agricultural style) and minimize visual mass. Exterior finishes should avoid reflective surfaces. Colors for larger visible tanks and structures should be darker earth tones to reduce contrast with the ground plain and increase compatibility with the visual setting. Primary structures should combine multiple complementary colors such in ranges of browns, tans, greys, greens, or other colors agreed upon with the appropriate permitting agency.		X			1. CalAm will include in contract specifications the requirement that architectural features complement the community styles. 2. CalAm will demonstrate compliance to the CPUC.	1. During facility design 2. Prior to construction
Impact 6.12-2: Permanent facilities could have an adverse effect on scenic vistas, damage scenic resources, or degrade the existing visual character or quality of the site and its surroundings.	**Mitigation Measure 4.12-2b:** The applicant shall design fencing to be minimally intrusive to the community yet complementary to the architectural character of the facility and the community. Fencing will be coordinated with landscaping and facility design to help further enhance the local aesthetics and to blend the facility with the surrounding community and/or natural setting. Vegetative screening using native plants, trees or shrubs will be used if it is not out of character with the site setting, and walled perimeters will be avoided in natural settings to minimize the dominance of structures in the scene.		X	X		1. CalAm will include in contract specifications the requirement that fencing will be complementary to the community styles. 2. CalAm will demonstrate compliance to the CPUC.	1. During facility design 2. Prior to construction
AESTHETICS RESOURCES (cont.)							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.12-2: Permanent facilities could have an adverse effect on scenic vistas, damage scenic resources, or degrade the existing visual character or quality of the site and its surroundings.	**Mitigation Measure 4.12-2c:** If location of facilities is flexible, structures, roads and ponds should be placed to minimize their prominence in the landscape and proximity to roads, publicly accessible viewpoints and residences. If possible, facilities should be located away from sensitive landscape units, and if necessary screened to minimize visual contrast with the surrounding setting.		X	X		1. CalAm will include in contract specifications the requirement that facilities be sited to minimize their prominence in the landscape. 2. CalAm will demonstrate compliance to the CPUC.	1. During facility design 2. Prior to construction
Impact 6.12-3: Exterior lighting associated with proposed facilities would create new sources of light and glare in the surrounding areas.	**Mitigation Measure 4.12-3a:** To ensure that the project's exterior lighting does not spill over onto the adjacent uses, all exterior light fixtures, including street lighting, shall be shielded or directed away from adjoining uses.		X	X		1. CalAm will include in contract specifications the requirement that exterior lighting not spill over into adjacent uses. 2. CalAm will demonstrate compliance to the CPUC.	1. During facility design 2. Prior to construction
Impact 6.12-3: Exterior lighting associated with proposed facilities would create new sources of light and glare in the surrounding areas.	**Mitigation Measure 4.12-3b:** Outdoor light intensity shall be limited to that necessary for adequate security and safety. All outside lighting shall be directed to prevent spillage onto adjacent properties and shall be shown on the site plan and elevations.		X	X		1. CalAm will include in contract specifications the requirement that exterior lighting be limited to that necessary for security and safety. 2. CalAm will demonstrate compliance to the CPUC.	1. During facility design 2. Prior to construction
CULTURAL RESOURCES							
Impact 6.13-1: Project construction has the potential to affect known archaeological resources.	**Mitigation Measure 4.13-1a:** ***Pre-Construction Survey*****.** The project applicant shall perform pre-construction surveys for any project components not yet surveyed due to lack of access or modifications in project component siting (e.g., new pipelines, staging areas, access roads, facilities). If resources are discovered during the surveys, Mitigation Measures 4.13-1b-d	X	X	X	X	1. CalAm will conduct or have preconstruction surveys conducted. If no resources are found no further mitigation is needed. If resources are found, Mitigation Measures 4.13-1b through 4.13-1d shall be	1. During final design 2. Prior to construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	shall be followed.					followed 2. CalAm will demonstrate compliance to the CPUC	
CULTURAL RESOURCES (cont.)							
Impact 6.13-1: Project construction has the potential to affect known archaeological resources.	**Mitigation Measure 4.13-1b: *Avoidance.*** The project applicant will seek to avoid cultural resources as the preferred mitigation measure. Avoidance of cultural resources would result in less-than-significant levels of impacts to identified cultural resources. All design-level engineering and construction drawings will be prepared in consultation with a cultural resource specialist. Facilities, staging areas, and any activity involving ground disturbance shall be located to avoid resources. To ensure that no inadvertent damage occurs to avoided cultural resources, the cultural resource boundaries shall be marked as exclusion zones both on the ground and on construction maps. This would include resources within 30 meters of the proposed project component.	X	X	X	X	1. CalAm will include in contract specifications the requirement that cultural resource boundaries be marked as exclusion zones both on the ground and on maps; facility staging areas and activities involving ground disturbance be located to avoid resources; and design-level engineering and construction drawings be prepared in consultation with a cultural resource specialist. 2. CalAm will demonstrate compliance to the CPUC	1. During final design 2. Before construction
Impact 6.13-1: Project construction has the potential to affect known archaeological resources.	**Mitigation Measure 4.13-1c: *Evaluation for California Register of Historic Resources (CRHR).*** If avoidance is determined to be infeasible, The project applicant shall retain a qualified archaeologist to evaluate the potentially significant resources for CEQA "importance" or eligibility for the CRHR. The purpose of further action will be to define a course of action to satisfy CEQA requirements for an Assessment of Effects. In the case of prehistoric archaeological sites, evaluation may be completed by examining existing records and reports, detailed recording, and/or excavation to determine data potential of the sites. Historic resource mitigation measures may include further study to evaluate the sites, detailed recording, and/or excavation. Resources found not to be "important" would require no further management. If cultural	X	X	X	X	1. CalAm will include in contract specifications the requirement that if cultural resources cannot be avoided, they be evaluated by a qualified archaeologist for importance or CRHR eligibility. 2. CalAm will demonstrate to the CPUC that a data recovery program has been developed for any eligible resources. Resources found not to be important or eligible for the CRHR would require no further	1. During final design 2. Before construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	resources are considered "important" per CEQA or eligible for the CRHR, then a data recovery program shall be implemented to reduce impacts to less-than-significant levels as required by the CEQA Guidelines. Data recovery could include excavation and detailed analysis and/or further research, depending on the nature and type of the site. Excavated materials would be curated at an appropriate facility, such as Sonoma State University or San Francisco State.					management.	
CULTURAL RESOURCES (cont.)							
Impact 6.13-1: Project construction has the potential to affect known archaeological resources.	**Mitigation Measure 4.13-1d:** ***Cultural Resources Treatment Plan (CRTP).*** The project applicant shall develop a Cultural Resources Treatment Plan (CRTP) for all known and newly discovered cultural resources within areas of direct impact of project activities, including but not limited to those detailed below. This plan will be sent to the CPUC for review and approval. • Procedures for protection and avoidance of ESAs, evaluation and treatment of the unexpected discovery of cultural resources including Native American burials; • Provisions and procedures for Native American consultation; • Detailed reporting requirements by the project Archaeologist; • Curation of any cultural materials collected during the project; and • Requirements to specify that archaeologists and other discipline specialists meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation (OHP). *Avoidance.* Implementation of the CRTP shall ensure that known and recorded cultural resources eligible for listing on	X	X	X	X	1. CalAm will prepare, or a Cultural Resources Treatment Plan will be prepared, and elements of the plan will be included in contract specification as needed. 2. CalAm will demonstrate to the CPUC that a Cultural Resources Treatment Plan, including required training and monitoring, has been prepared and implemented.	1,2. Prior to construction

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	the CRHR or National Register of Historic Places (NRHP) will be avoided during construction and operation and maintenance if feasible. If cultural resources are considered "important" per CEQA or eligible for the CRHR or NRHP and cannot be avoided, then a data recovery program shall be implemented to reduce impacts to less-than-significant levels as required by the CEQA Guidelines. Data recovery could include excavation and detailed analysis and/or further research, depending on the nature and type of the site. Specific protective measures shall be defined in the CRTP to reduce the potential adverse impacts on any presently undetected cultural resources to less-than-significant levels. The CRTP shall define construction procedures for areas near known/recorded cultural sites eligible for the CRHR or NRHP.						
CULTURAL RESOURCES (cont.)							
Impact 6.13-1 (cont.)	Wherever a tower, access road, equipment, etc., must be placed or accessed within 100 feet of a recorded, reported, or known archaeological site eligible or potentially eligible for the CRHR, the site will be flagged on the ground as an ESA (without disclosure of the exact nature of the environmental sensitivity [i.e., the ESA is *not* identified as an archaeological site]). Construction equipment shall then be directed away from the ESA, and construction personnel shall be directed not to enter the ESA. Archaeological monitoring of project construction shall be focused in the immediate vicinity of the designated ESAs during initial mass grading operations or deep excavations such as foundation footings. *Construction Personnel Training.* Construction supervisory personnel shall be notified of the existence of these resources and required to keep personnel and equipment away from these areas. The project applicant -assigned qualified archeologist shall be notified prior to initiation of construction activities. Periodic monitoring of cultural resources to be avoided						

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	shall be completed by a qualified archeologist to ensure that no inadvertent damage to the resources occurs as a result of construction or construction-related activities. The timing and frequency of this monitoring shall be at the discretion of the archaeologist. During construction and operations, personnel and equipment shall be restricted to the project work site. *Construction Monitoring*. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historic and prehistoric resources that could be encountered in the Monterey Bay area. Monitoring shall occur in all areas of ground disturbing activity that occur within 30 meters of a cultural resource exclusion zone during initial mass grading operations or deep excavations such as foundation footings. A Native American monitor may be required at all culturally sensitive locations. Decisions regarding the necessity of a Native American monitor shall be based on consultation with Native American groups and individuals prior to ground disturbing activities in culturally sensitive areas.						
CULTURAL RESOURCES (cont.)							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 6.13-2: Unanticipated archaeological discoveries may be damaged or destroyed during project construction.	**Mitigation Measure 4.13-2: *Training and Reporting*.** Prior to the initiation of construction or ground disturbing activities, all construction personnel shall be alerted to the possibility of buried cultural remains, including prehistoric and/or historic resources. During construction and operations, personnel and equipment shall be restricted to the project work site. Personnel shall be instructed that upon discovery of buried cultural materials, work in the immediate area of the find shall be immediately halted and the project applicant shall be notified. Once the find has been identified by a qualified archaeologist, then the project applicant shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the find is found to be important per CEQA (Appendix K). Application of Mitigation Measure 4.13-1b would be appropriate if the find cannot be avoided. In the case that that the find can't be avoided, Mitigation Measures 4.13-2c-d shall be implemented.	X	X	X	X	1. CalAm will include in contract specifications, the requirement that all construction personnel receive training on the potential for finding resources, and the proper reporting and handling requirements if resources are encountered. 2. CalAm documents to the CPUC that training has been conducted and any finds are reported	1. During final design 2. Before and during construction
Impact 6.13-3: Potential to uncover human remains.	**Mitigation Measure 4.13-3: *Human Remains*.** If buried human remains are encountered during construction, work shall be *immediately* halted, and the project applicant and the Monterey County coroner shall be *immediately* notified. If the remains are determined to be Native American, then the Native American Heritage Commission (NAHC) will be notified within 24 hours as required by Public Resources Code 5097. The NAHC shall notify designated Most Likely Descendants. The MLD is responsible for providing recommendations for the treatment of the remains within 48 hours of being granted access to the find.	X	X	X	X	1. CalAm will include procedures related to the discovery of human remains in contract specifications. 2. CalAm will document to the CPUC that any discoveries of human remains are reported and treated appropriately.	1. During final design 2. During construction
ENERGY							

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
Impact 4.14-1: Construction of the project could result in the substantial consumption of energy such that existing supplies would be constrained and could result in the wasteful use of energy resources that are not renewable. **Impact 6.14-1:** Construction of the Phase 1 and Phase 2 Regional Projects could result in the substantial consumption of energy such that existing supplies would be constrained and could result in the wasteful use of energy resources that are not renewable.	**Mitigation Measures 4.8-1c**	X	X	X	X	See Mitigation Measures 4.8-1c above for applicable monitoring and reporting actions.	
Impact 6.14-2: Operation of the Phase 1 and Phase 2 Regional Projects would increase long-term consumption of electricity at the project facilities, which could result in the wasteful use of energy resources that are not renewable.	**Mitigation Measure 6.14-1: An *Energy Conservation Plan*** shall be prepared for the Regional Project subject to review and approval by the CPUC prior to the start of construction. The plan shall evaluate the energy demands for both electrical and natural gas of the selected project power supply against the energy demands of direct use of electricity from the PG&E grid. If the *Energy Conservation Plan* cannot demonstrate that the proposed power supply other than PG&E grid alone represents the same or less demands on the energy supply system, then the applicant shall power the project from the PG&E grid. Cost cannot be a factor for determining	X	X	X	X	1. CalAm will prepare or have prepared, an Energy Conservation Plan for review and approval by the CPUC 2. CPUC signs-off on the Plan.	1,2. Prior to the start of project operations

Impact	Mitigation Measure	Applicable Site(s)				Monitoring and Reporting Program	
		TM South S of Ft Ord	Terminal Reservoir	ASR	Monterey Pipeline	Monitoring and Reporting Actions: *CalAm Reports On, and the CPUC Monitors all Mitigation Measures*	Implementation Schedule
	infeasibility.						

(END OF APPENDIX C)

APPENDIX D
Evaluation of Financial Alternatives
APPENDIX D
Evaluation of Financial Alternatives

Summary

Sensitivity analysis of various financial alternatives using the Uniform Financing model indicates that the cost of water and the incremental first year revenue requirement (collectively, rate impact) are affected by (1) The type of financing used for the project; (2) The debt coverage ratio; (3) The years taken to construct the facilities; and (4) The AFUDC rate. It was noticed that for the assumptions used, lower rates of financing and the availability of State Revolving Fund monies (SRF) resulted in lower rate impact compared with the case where financing was at higher rates. Similarly, the debt coverage ratio and the years of construction had significant rate impacts. The AFUDC rate did not have a major rate impact.

Two scenarios were investigated for the Proposed Decision (PD). The first scenario (Scenario 1) assumed the Cost of the Regional Project Facilities capped at $227.3 million, and Cal-Am facilities capped at $95 million. The second scenario (Scenario 2) assumed the Cost of the Regional Project Facilities capped at $275.5 million, and Cal-Am facilities capped at $106.875 million. Scenario 1 resulted in lower rate impact compared with Scenario 2. For the assumptions used, the cost of water to Cal-Am customers ranged from $4,814 to $9,097 per acre foot (af) for Scenario 1 versus $5,437 to $10,592 per af for Scenario 2. The Revenue Requirements for 2015 without the project are estimated at $70.41 million. The range of incremental revenue requirement for 2015 after plant addition for Scenario 1 was $44.14 million to $81.86 million versus $49.88 to $95.27 million for Scenario 2.

Two "Modified Scenarios" were investigated for the Alternate Proposed Decision. The maximum cost of the Regional Project Facilities was capped at $297.5 million, debt coverage ratio of 1.25 and an AFUDC rate of 4.0% was used. Three bond issuances @ 5% and two State Revolving Fund (SRF) funding totaling $150 million were assumed. Based on these assumptions, the cost of water was $6,272 and $6,303 per acre-foot for 3.5 and 4.5 years of construction, respectively. The incremental 2015 revenue requirements for the project were $57.23 million and $57.51 million respectively. The total 2015 revenue requirement was $127.64 million and $127.92 million, respectively.

Section 1: Description

The Unified Financial Model (Model) was jointly developed by parties to the proceeding to calculate the financing needs of the project. The model can be used to calculate the amount and timing of bond issuances, the payment requirements to service the debt, cost of water for Cal-Am ratepayers and the annual Revenue Requirements.

The Model was run for various financial alternatives using combinations of debt coverage, AFUC rates and years of construction to complete the project.

a. **Financing arrangements**

Project may be financed using a combination of single or multiple bond issuances with and without State Revolving Funds (SRF) monies and Federal Grants. All SRF funds assume a 2.5% interest rate. The following financing alternatives were considered:

i. One bond issuance @ 8.67% and no SRF.

ii. One bond issuance @ 6% and no SRF.

iii. Two bond issuances @ 6%, without SRF.

iv. Three bond issuances @ 5%, without SRF.

v. Two bond issuances @ 6% and one SRF issuance of $150 million.

vi. Three bond issuances @ 5% and two SRF issuances of $110 and $40 million respectively.

b. **Years to complete the project.**

The longer the project construction time, the higher is the total project cost. Alternatives using 3.5 years and 4.5 years for project construction were evaluated.

c. **Debt coverage**

Debt coverage is required by the lender. Debt coverage of 1.0 and 1.25 were used in the analysis.

d. **AFUDC**

An AFUDC rate of 2.46 % as recommended by DRA and an AFUDC of 8.4% as recommended by Cal-Am were used.

The following were held constant for all model runs.

Table 1: Unified Financial Model Run assumptions

Items held constant in all computer runs

General Assumptions		CAW Assumptions	
Uncollectibles	0.50%		
O&M Expenses ($2010)	$11,600,000	O&M	$1,450,000
% Water remaining in the Basin	15.00%	Debt	8.67%
MCWD Water Cost ($/AF)	$ 148.50	ROR	9.44%
Inflation	4.00%	Net to Gross	1.67%
Depreciation	2.50%	Property Tax	1.33%
CAW Effective Tax Rate	40.00%	Revenue Growth	9.00%
		UPIS Tranfer	100.00%
Surcharge #2	No	Debt Ratio	50.00%
Annual Advice Letter Filing	No		
Total Water Production (afy)	10,500		
CAW Allocation (afy)	8,800		
Groundwater Offset to MCWD (afy)	1,700		

Revenue requirement for no plant addition case for 2015

The revenue requirements for Cal Am ratepayers without the plant addition are assumed to increase by 9% each year. Using Cal-Am's 2009 recorded revenue requirements of $41.983 million and escalating the same by 9%, the revenue requirements for 2015 without any plant addition is $70.41 million. The total revenue requirement for Cal-Am ratepayers is the sum of

the revenue requirements without the plant and the incremental revenue requirements for the plant addition.

The rate impacts for the "Best" and "Worst" case scenarios is discussed in Section 2. A sensitivity analysis of the rate impact from combinations of various financial assumptions is discussed in Section 3. The rate impacts for the "Modified Scenario" are discussed in Section 4. A summary of all Model run results used in the Sensitivity analysis are reproduced in Section 5.

Section 2: Evaluation of Best and worst case scenarios

The following scenarios were evaluated for the PD:

Scenario # 1: Plant Cost capped at $227.3 million / CAW plant costs capped at $95 million. This is also referred to as the "Best Case" scenario.
Scenario # 2: Plant Cost capped at $275.5 million / CAW Plant costs capped at $106.875 million. This is also referred to as the "Worst Case" scenario.

a. Best case scenarios

The best case is Scenario1 because it yields the lowest cost of water and revenue requirements. Assuming three bond issuances @ 5% ($65.35 million on 2010, $25.0 million in 2012 and $8.64 million in 2014), two SRF funding rounds of $100 and $40 million, a coverage ratio of 1.0, AFUDC of 2.46%, 3.5 yrs of construction, the incremental 2015 revenue requirement was $44.14 million and Cost of Water was $4,814/af. The total revenue requirement was $114.55 million, an increase of 62.69% over the 2015 revenue requirement of $70.41 for the no plant case.

Best Case Scenario -1 --- with Coverage Ratio = 1.00

Scenario 1	Capital Cost Cap:	$ 227,300,000	CAW Cost Cap: $ 95,000,000						
Alternative	1.A.1.	11	3 Issuance; 2 SRF Funding; No Grants						
Financing :	3 PAB Issuance @	5.00%	5.00%	5.00%	Yrs of Const:	3.50	AFUDC Rate:	2.46%	

Unified Financing Model - Regional Project*									
5/19/2010				Uncollectibles	0.5%	CAW Facilities	$ 95,000,000	1st Year'	Per AF
Plant Cap	$ 227,300,000	Grants	$ -	O&M (2010 $'s)	$ 11,600,000	CAW O&M	$ (1,450,000)	Plant Cost	$ 2,944
				Production-AFY	10,350	CAW Debt	8.67%	Cost to CAW	$ 3,448
	Rate	Reserve Iteration	SRF ($'s)	30	15.0%	CAW R.O.R.	9.44%	Transfer Cost	$ 504
Issuance #1	5.00%	10%		MCWD Price	$ 148.50	CAW AFUDC	2.46%	CAW Facilities	$ 1,366
Issuance #2	5.00%	3%	$ 110,000,000	Inflation	4%	Net-To-Gross	1.67	CAW Cost'	$ 4,814
Issuance #3	5.00%	2%	$ 40,000,000	Depreciation	2.50%	Property Tax %	1.33%		
Reserve Interest	0.50%	Total Years		Effective Tax	40.00%	Revenue Growth	9%	30-Year AVG'	$ 5,300
Coverage	1.00	of Construction	3.5	Surcharge #2	NO	UPIS Transfer	100%	Equity Rate	10.20%
				Annual AL	NO	Debt %	50%	Pre-Close Dep%	100%

When the coverage ratio was increased to 1.25, assuming three bond issuances were changed to ($65.26 nil in 2010, $24.84 in 2012 and $8.58 million in 2014) and two SRF funding rounds of $100 and $40 million, the cost of water was $5,281 and revenue requirement was $48.25 million. This represents an increase of 68.5% over the 2015 revenue requirement without the additional plant case.

Best Case Scenario - 2 --- with Coverage Ratio = 1.25

Scenario 2	**Capital Cost Cap:**	**$ 227,300,000**	**CAW Cost Cap: $ 95,000,000**			
Alternative	2.A.1.	11	3 Issuance; 2 SRF Funding; No Grants			
Financing :	3 PAB Issuance @	5.00%	5.00%	5.00% Yrs of Const:	3.50	AFUDC Rate: 2.46%

Unified Financing Model - Regional Project*

5/19/2010

				Uncollectibles	0.5%	**CAW Facilities**	$ 95,000,000	**1st Year'**	**Per AF**
Plant Cap	$ 227,300,000	**Grants**	$ -	**O&M (2010 $'s)**	$ 11,600,000	**CAW O&M**	$ (1,450,000)	**Plant Cost**	$ 3,339
				Production-AFY	10,350	**CAW Debt**	8.67%	**Cost to CAW**	$ 3,915
	Rate	**Reserve Iteration**	**SRF ($'s)**	**30**	15.0%	**CAW R.O.R.**	9.44%	**Transfer Cost**	$ 576
Issuance #1	5.00%	**10%**		**MCWD Price**	$ 148.50	**CAW AFUDC**	2.46%	**CAW Facilities**	$ 1,366
Issuance #2	5.00%	**3%**	$ -	**Inflation**	4%	**Net-To-Gross**	1.67	**CAW Cost'**	$ 5,281
Issuance #3	5.00%	**2%**	$ -	**Depreciation**	2.50%	**Property Tax %**	1.33%		
Reserve Interest	0.50%	**Total Years**		**Effective Tax**	40.00%	**Revenue Growth**	9%	**30-Year AVG'**	$ 5,600
Coverage	1.25	**of Construction**	3.5	**Surcharge #2**	NO	**UPIS Transfer**	100%	**Equity Rate**	10.20%
				Annual AL	NO	**Debt %**	50%	**Pre-Close Dep%**	100%

b. Worst case scenarios

The worst case is Scenario 2 because it yields the highest cost of water and the largest revenue requirements. Assuming a single bond issuance of $528.05 million @ 8.67%, no SRF funding, a coverage ratio of 1.00, AFUDC of 2.46%, 4.5 yrs construction, the incremental 2015 revenue requirement was $81.94 million and Cost of Water was $9,081/af. The total revenue requirement was $152.35 million, an increase of 116.35% over the 2015 revenue requirement of $70.41 million for the no plant case.

Worst Case Scenario - 1 --- with Coverage Ratio = 1.00

Scenario 1	**Capital Cost Cap:**	**$ 275,500,000**	**CAW Cost Cap: $ 106,875,000**		
Alternative	1.B.1.	2	1 Issuance; No SRF Funding; No Grants		
Financing :	1 PAB Issuance @	8.67%	Yrs of Const:	4.5	AFUDC Rate 2.46%

Unified Financing Model - Regional Project*

5/19/2010

				Uncollectibles	0.5%	**CAW Facilities**	$ 106,875,000	**1st Year'**	**Per AF**
Plant Cap	$ 275,500,000	**Grants**	$ -	**O&M (2010 $'s)**	$ 11,600,000	**CAW O&M**	$ (1,450,000)	**Plant Cost**	$ 6,390
				Production-AFY	10,350	**CAW Debt**	8.67%	**Cost to CAW**	$ 7,522
	Rate	**Reserve Iteration**	**SRF ($'s)**	**30**	15.0%	**CAW R.O.R.**	9.44%	**Transfer Cost**	$ 1,132
Issuance #1	8.67%	**83%**		**MCWD Price**	$ 148.50	**CAW AFUDC**	2.46%	**CAW Facilities**	$ 1,559
Issuance #2	0.00%	**0%**	$ -	**Inflation**	4%	**Net-To-Gross**	1.67	**CAW Cost'**	$ 9,081
Issuance #3	0.00%	**0%**	$ -	**Depreciation**	2.50%	**Property Tax %**	1.33%		
Reserve Interest	0.50%	**Total Years**		**Effective Tax**	40.00%	**Revenue Growth**	9%	**30-Year AVG'**	$ 9,900
Coverage	1.00	**of Construction**	4.5	**Surcharge #2**	NO	**UPIS Transfer**	100%	**Equity Rate**	10.20%
				Annual AL	NO	**Debt %**	50%	**Pre-Close Dep%**	100%

When the coverage ratio was increased to 1.25, assuming a single bond issuance of $528.05 million @ 8.67%, the incremental 2015 revenue requirement was $95.01 million and Cost of Water was $10,566/af. The total revenue requirement was $165.68 million, an increase of 135.31% over the 2015 revenue requirement of $70.41 million for the no plant case.

Worst Case Scenario - 2 --- with Coverage ratio = 1.25

Scenario 2	**Capital Cost Cap:**	**$ 275,500,000**	**CAW Cost Cap:**	**$ 106,875,000**	
Alternative	2.B.1.	2	1 Issuance; No SRF Funding; No Grants		
Financing :	1 PAB Issuance @	8.67%	Yrs of Const:	4.5	AFUDC Rate 2.46%

Unified Financing Model - Regional Project*

5/19/2010

				Uncollectibles	0.5%	**CAW Facilities**	$ 106,875,000	**1st Year'**	**Per AF**
Plant Cap	$ 275,500,000	**Grants**	$ -	**O&M (2010 $'s)**	$ 11,600,000	**CAW O&M**	$ (1,450,000)	**Plant Cost**	$ 7,647
				Production-AFY	10,350	**CAW Debt**	8.67%	**Cost to CAW**	$ 9,006
	Rate	**Reserve Iteration**	**SRF ($'s)**	**30**	15.0%	**CAW R.O.R.**	9.44%	**Transfer Cost**	$ 1,359
Issuance #1	8.67%	**83%**		**MCWD Price**	$ 148.50	**CAW AFUDC**	2.46%	**CAW Facilities**	$ 1,560
Issuance #2	0.00%	**0%**	$ -	**Inflation**	4%	**Net-To-Gross**	1.67	**CAW Cost'**	$ 10,566
Issuance #3	0.00%	**0%**	$ -	**Depreciation**	2.50%	**Property Tax %**	1.33%		
Reserve Interest	0.50%	**Total Years**		**Effective Tax**	40.00%	**Revenue Growth**	9%	**30-Year AVG'**	$ 11,400
Coverage	1.25	**of Construction**	4.5	**Surcharge #2**	NO	**UPIS Transfer**	100%	**Equity Rate**	10.20%
				Annual AL	NO	**Debt %**	50%	**Pre-Close Dep%**	100%

See Table 2 for a summary of the Best and Worst case scenarios.

Table 2: Comparison of Best and Worst case Scenarios

Scenario	*Plant Cap*	*CAW Facilities*	*Financing*		*Const*	*AFUDC*	*Cov.*	*CAW*	*2015 Rev. Reqt.*			
		Cap	*Bond*	*SRF*			*Ratio*	*cost*	*w/plant*	*w/o plant*	*Total*	*Incr.*
			Issuances					*of Water*				*w/plant*
	(Mil $)	*(Mil $)*			*(Yrs)*			*$/af*	*$mil*	*$mil*	*$mil*	
Best Case - 1	227.30	95.00	3 issuances @ 5%;	2 @ $100mil and $40 mil	3.5	2.46%	1.00	4,814	44.14	70.41	114.55	62.69%
Best case - 2	227.30	95.00	3 issuances @ 5%;	2 @ $100mil and $40 mil	3.5	2.46%	1.25	5,281	48.25	70.41	118.66	68.53%
Worst case - 1	275.50	106.88	1 issuance @ 8.67%	None	4.5	2.46%	1.00	9,081	81.94	70.41	152.35	116.37%
Worst Case - 2	275.50	106.88	1 issuance @ 8.67%	None	4.5	2.46%	1.25	10,592	95.27	70.41	165.68	135.31%

Section 3: Sensitivity analysis

The Model was run for each of the two Scenarios to ascertain the impact on revenue requirements and cost of water for a range of financial arrangements, coverage ratio, years of construction and AFUDC. A total of 96 runs were made. The results are shown in Tables 1a through 4b.

a. Impact of financing arrangements

The Model was run for six different financing arrangements using various combinations of the debt coverage ratio, years of construction and AFUDC rates. Table 3 shows the range of cost of water, incremental 2015 revenue requirements and the total Revenue requirements for 2015 for each of financing arrangements considered and the number of years for construction.

Table 3: Comparison of revenue impacts for various alternatives

Financing Option [1]	Financing Rate [2]	CAW Cost of Water [3]				2015 incremental Revenue requirements [4]				2015 Total Revenue requirements [5]			
		3.5 Years		4.5 Years		3.5 Years		4.5 Years		3.5 Years		4.5 Years	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
		$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil
1	8.67%	$7,112	$9,477	$ 7,848	$10,592	64.36	85.46	74.09	95.27	141.25	155.87	144.50	165.68
2	6.00%	$5,699	$7,335	$ 5,986	$ 7,770	51.93	66.61	59.02	70.44	124.86	137.02	129.43	140.85
3	6.00%	$5,405	$6,890	$ 5,646	$ 7,255	49.34	62.69	55.88	65.91	121.88	133.10	126.29	136.32
4	5.00%	$5,024	$6,313	$ 5,178	$ 6,546	45.99	57.62	51.82	59.67	117.75	128.03	122.23	130.08
5	4.31%	$5,033	$6,416	$ 5,122	$ 6,600	46.07	58.52	52.53	60.14	117.26	128.93	122.94	130.55
6	3.67%	$4,814	$6,039	$ 4,849	$ 6,064	44.14	55.20	49.88	55.43	114.86	125.61	120.29	125.84

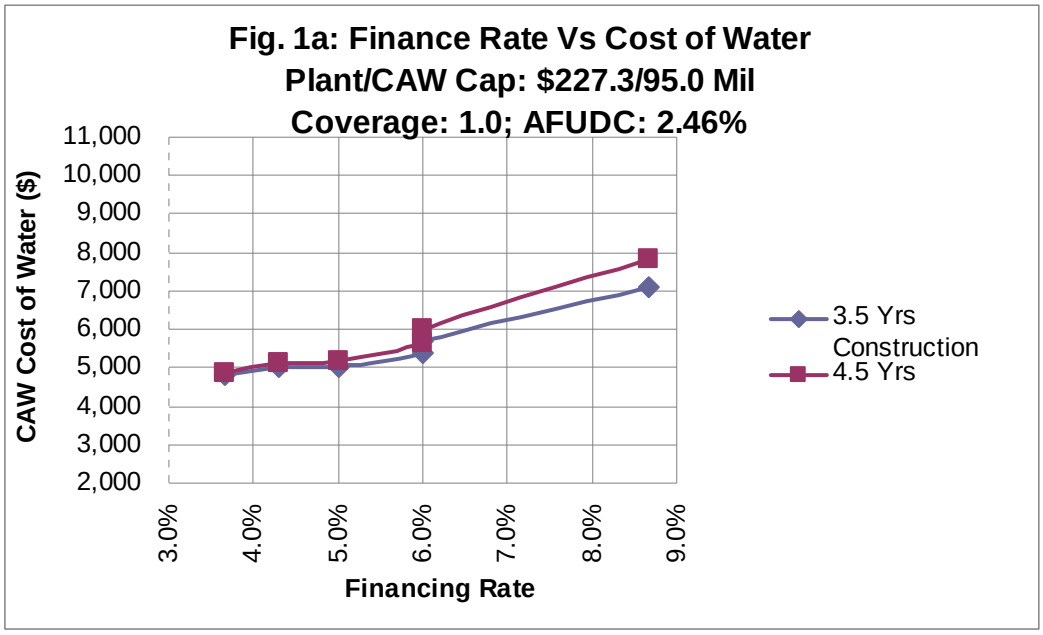
Notes

1	1	1 Issuance @ 8.67%; No SRF
	2	1 Issuance @ 6%; No SRF
	3	2 Issuances @ 6%; No SRF
	4	3 Issuances @ 5%; No SRF
	5	2 Issuances @ 6%; 1 SRF ($150 mil)
	6	3 Issuances @ 5%; 2 SRF($110 & $40 mil)
2	Weighted average cost of debt.	
3	CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.	
4	Incremental Revenue Requirement due to Plant addition	
5	Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.	

It is observed that the lowest weighted average cost of debt resulted in lower revenue requirements and the corresponding cost of water to Cal-Am's customers.

b. Impact of Debt coverage and years of Construction

For Scenarios 1 and 2, the impact of Debt coverage was evaluated using a coverage ratio of 1.00 and 1.25 respectively and years of construction of 3.5 and 4.5 years. For Scenario 1, Figs. 1a and 2a are graphical representations of the cost of water and incremental revenue requirements for 3.5 and 4.5 years of construction and a coverage ratio of 1.00. Figs. 3a and 4a show the same for a coverage ratio of 1.25. Similar trends are observed for Scenario 2. For details, see Table 4.



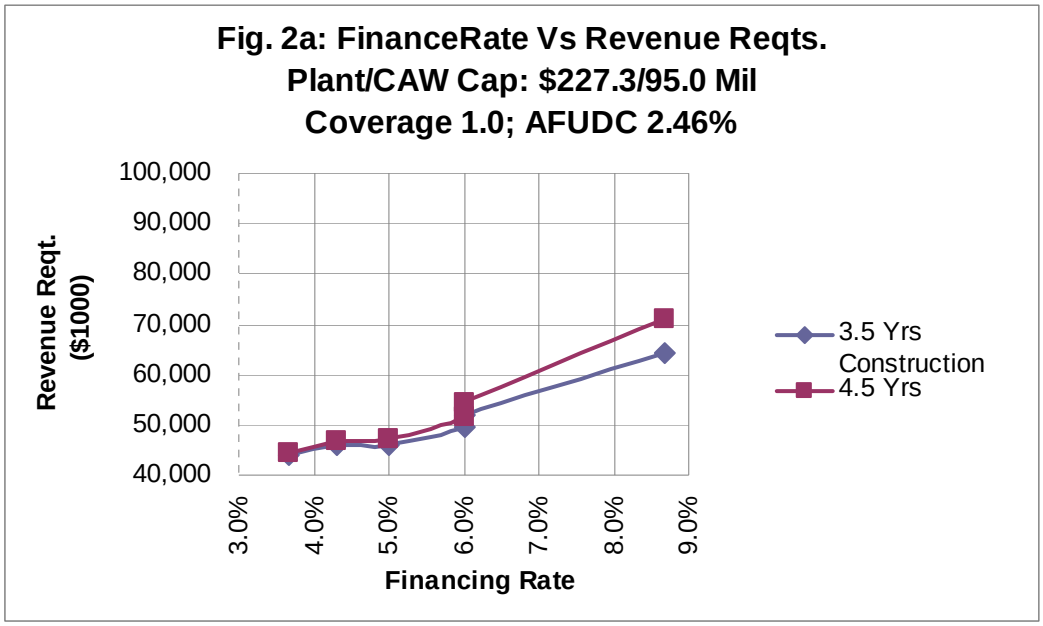


Fig. 2a: FinanceRate Vs Revenue Reqts.
Plant/CAW Cap: $227.3/95.0 Mil
Coverage 1.0; AFUDC 2.46%
Revenue Reqt. ($1000)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
3.0%
4.0%
5.0%
6.0%
7.0%
8.0%
9.0%
Financing Rate
3.5 Yrs Construction
4.5 Yrs

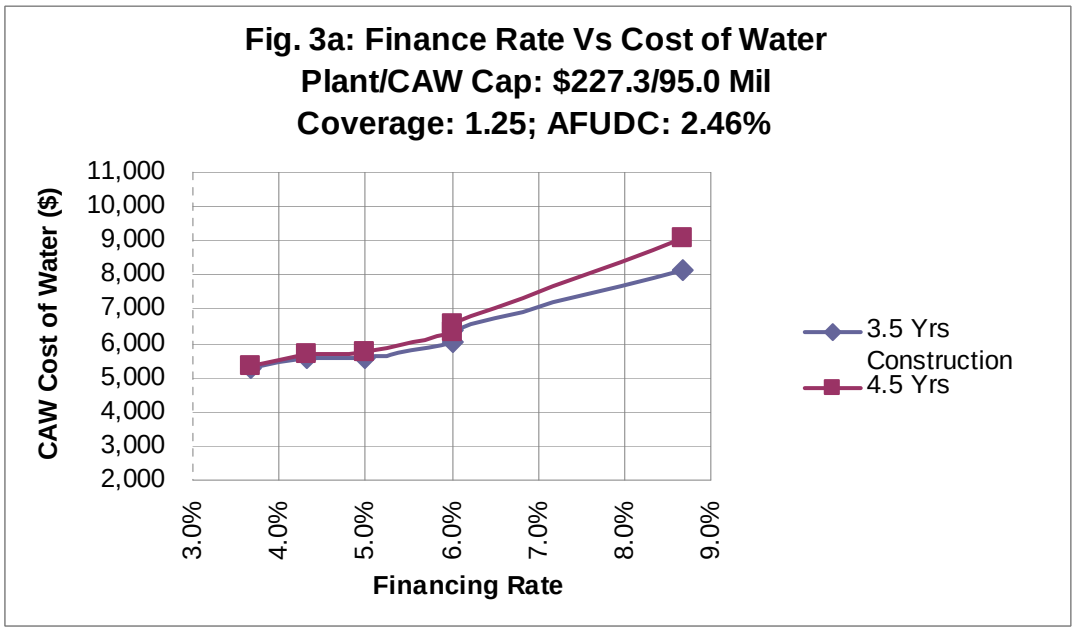


Fig. 3a: Finance Rate Vs Cost of Water
Plant/CAW Cap: $227.3/95.0 Mil
Coverage: 1.25; AFUDC: 2.46%
CAW Cost of Water ($)
11,000
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
3.0%
4.0%
5.0%
6.0%
7.0%
8.0%
9.0%
Financing Rate
3.5 Yrs Construction
4.5 Yrs

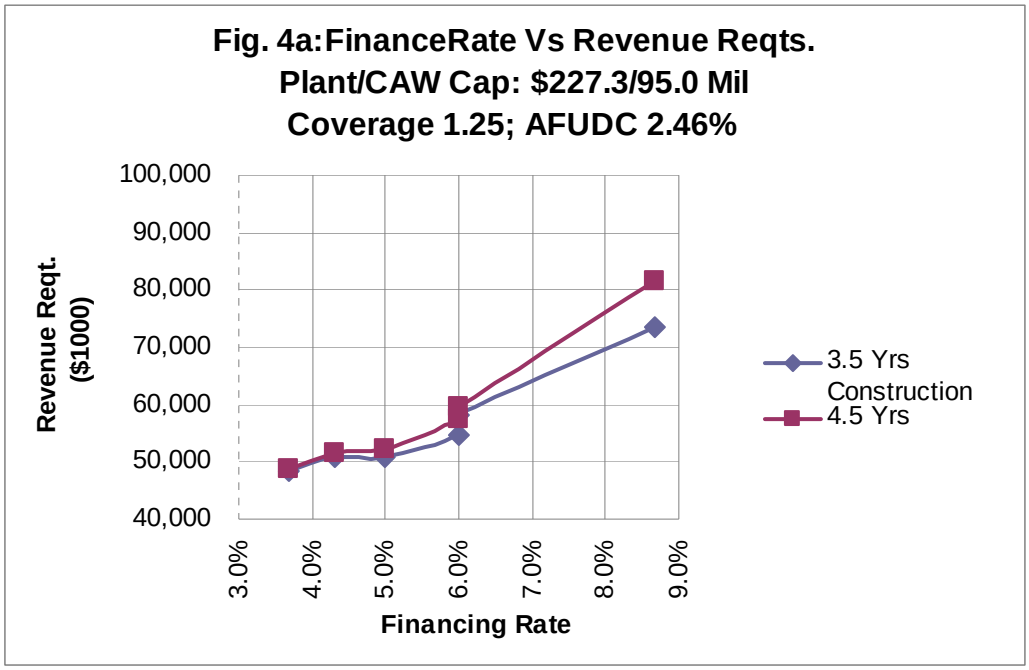


Table 4: Comparison of revenue impacts for various coverage ratios and Years of Construction

Financing Option [1]	*Financing Rate* [2]	CAW Cost of Water [3]								2015 incremental Rev Reqts [4]							
		3.5 Years				4.5 Years				3.5 Years				4.5 Years			
		Cov. Ratio : 1.00		*Cov. Ratio : 1.25*		*Cov. Ratio : 1.00*		*Cov. Ratio : 1.25*		*Cov. Ratio : 1.00*		*Cov. Ratio : 1.25*		*Cov. Ratio : 1.00*		*Cov. Ratio : 1.25*	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
						$	$	$	$	$mil	$mil	$mil	$mil	$mil	$mil	$mil	$mil
1	8.67%	$ 7,112	$8,215	$8,153	$9,477	$7,848	$9,107	$9,074	$10,592	64.36	74.35	73.53	85.46	70.84	82.20	81.63	$95.27
2	6.00%	$ 5,699	$6,502	$6,386	$7,335	$5,986	$6,849	$6,563	$ 7,770	51.93	59.28	57.98	66.61	54.45	62.33	59.54	$70.44
3	6.00%	$ 5,405	$6,145	$6,020	$6,890	$5,646	$6,438	$6,322	$ 7,255	49.34	56.14	54.75	62.69	51.47	58.71	57.41	$65.91
4	5.00%	$ 5,024	$5,684	$5,582	$6,313	$5,178	$5,870	$5,735	$ 6,546	45.99	52.08	50.90	57.62	47.34	53.72	52.25	$59.67
5	4.31%	$ 5,033	$5,684	$5,555	$6,416	$5,122	$5,912	$5,666	$ 6,600	46.07	52.08	50.66	58.52	46.85	54.09	51.64	$60.14
6	3.67%	$ 4,814	$5,463	$5,281	$6,039	$4,849	$5,485	$5,324	$ 6,064	44.14	50.14	48.25	55.20	44.45	50.33	48.63	$55.43

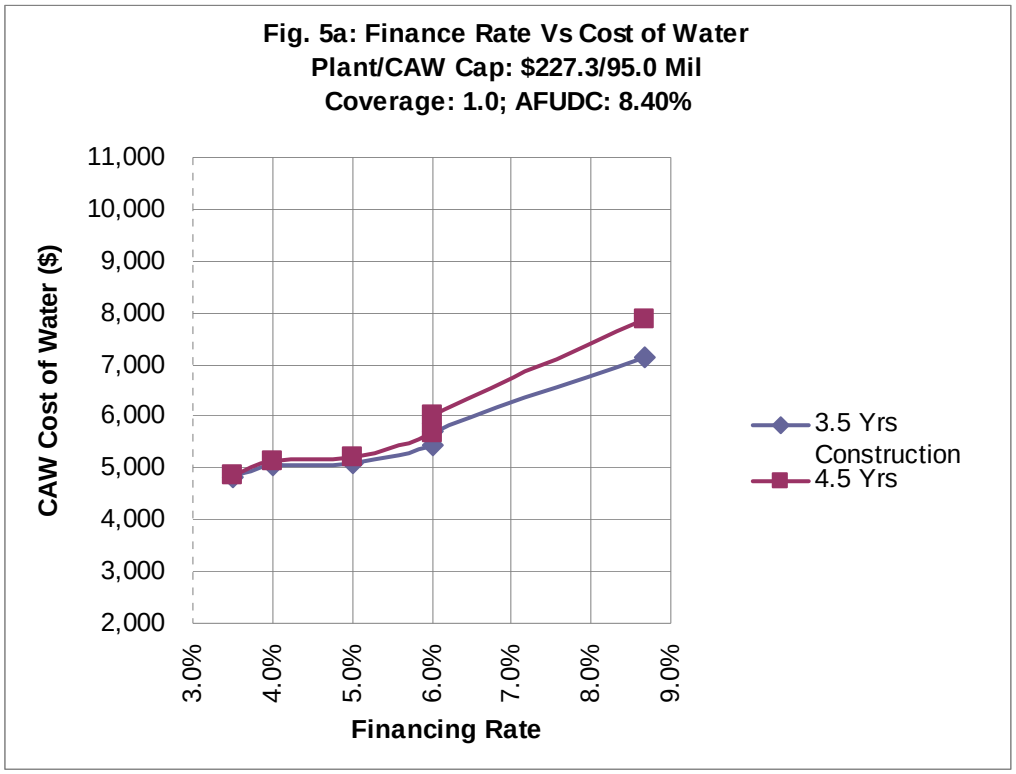
Notes

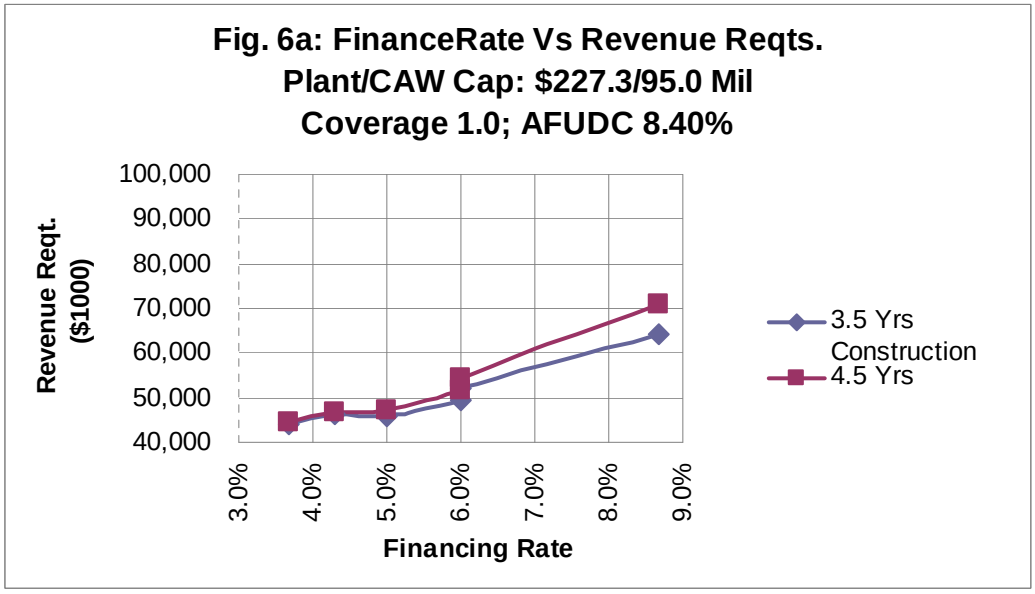
1	1	1 Issuance @ 8.67%; No SRF
	2	1 Issuance @ 6%; No SRF
	3	2 Issuances @ 6%; No SRF
	4	3 Issuances @ 5%; No SRF
	5	2 Issuances @ 6%; 1 SRF ($150 mil)
	6	3 Issuances @ 5%; 2 SRF($110 & $40 mil)
2	Weighted average cost of debt.	
3	CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.	
4	Incremental Revenue Requirement due to Plant addition	

It is observed that the debt coverage ratio has a significant impact on the cost of water and Revenue requirements as do the years of construction.

c. Impact of AFUDC rate

A graphical representation of Scenario 1 for an AFUC rate of 2.46% and an AFUDC rate of 8.4% for 3.5 and 4.5 years of construction is shown in Figs. 1a and 5a for CAW cost of water. Similar trends are seen for Revenue Requirements as shown in Figs. 2a and 6a.





It is observed that the AFUDC rate does not have a significant impact on the cost of water as well as the revenue requirements.

Section 4: Rate impacts for the Modified Scenarios

For the Modified Scenarios, the following assumptions were made: Plant Cap: $297.5 million; Total Cap for Cal-Am facilities: $106.875 million; Three bond issuances @ 5% ($83.531 million in 2010, $73.260 million in 2012 and $23.070 million in 2014) and two rounds of SRF funding of $100 and $40 million; an AFUDC rate of 4.0%; and a debt coverage of 1.25. For 3.5 yrs construction, the incremental 2015 revenue requirement was $57.23 million and Cost of Water was $6,272 per af. The total revenue requirement was $127.64 million, an increase of 81.28% over the 2015 revenue requirement of $70.41 for the no plant case. For 4.5 yrs construction, the corresponding incremental revenue requirement was $57.51 million, cost of water was $ 6,303 per af and the total revenue requirement was $127.92 million, an increase of 81.68 % over the 2015 revenue requirement for the no plant case. See Table 5 for a summary of the two cases considered in the Modified Scenarios.

Table 5: Rate impacts for the Modified Scenario [1]

Option	Plant Cap	CAW Facilities Cap	Const	AFUDC	Cov. Ratio	CAW cost of Water	2015 Rev. Reqt. For plant Addition	w/o plant Addition	Total with Plant addition	Increase due to Plant
	($ Mil)	($ Mil)	(Yrs)			$/af	$mil	$mil	$mil	
a	b	c	d	e	f	g	h	i	j=h+i	k=h/i
1	297.50	106.875	3.5	4.00%	1.25	6,272	57.23	70.41	127.64	81.28%
2	297.50	106.875	4.5	4.00%	1.25	6,303	57.51	70.41	127.92	81.68%

Notes

1 Financing consists of 3 bond issuances @ 5% ($2010: $85.531 mil; 2012: $73.260 mil; 2014: $23.07 mil)
Plus, 2 SRF Fundings of $110 and $40 mil.

Section 5: Summary of results of Model runs

A total of 96 runs were made for the sensitivity analysis using Scenarios 1 and 2. The results are summarized in tables 1a through 4b.

Table 1a: Scenario 1 -- Plant Cap: $227.3 mil; CAW Cap: $95.0 Mil; AFUDC: 2.46%; Debt coverage: 1.00;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	a	b	c	d	e	f	g	h	i	j
1	8.67%	$ 64,360,000	$ 134,770,509	91.41%	$ 7,112	8.67%	$ 70,840,000	$ 141,250,509	100.61%	$ 7,848
2	6.00%	$ 51,930,000	$ 122,340,509	73.75%	$ 5,699	6.00%	$ 54,450,000	$ 124,860,509	77.33%	$ 5,986
3	6.00%	$ 49,340,000	$ 119,750,509	70.07%	$ 5,405	6.00%	$ 51,470,000	$ 121,880,509	73.10%	$ 5,646
4	5.00%	$ 45,990,000	$ 116,400,509	65.32%	$ 5,024	5.00%	$ 47,340,000	$ 117,750,509	67.23%	$ 5,178
5	4.31%	$ 46,070,000	$ 116,480,509	65.43%	$ 5,033	4.38%	$ 46,850,000	$ 117,260,509	66.54%	$ 5,122
6	3.67%	$ 44,140,000	$ 114,550,509	62.69%	$ 4,814	3.68%	$ 44,450,000	$ 114,860,509	63.13%	$ 4,849

Notes

1 1 Issuance @ 8.67%; No SRF
2 1 Issuance @ 6%; No SRF
3 2 Issuances @ 6%; No SRF
4 3 Issuances @ 5%; No SRF
5 2 Issuances @ 6%; 1 SRF ($150 mil)
6 3 Issuances @ 5%; 2 SRF($110 & $40 mil)

2 Weighted average cost of debt.
3 Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.
4 Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509
5 CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.

Table 1b: Scenario 2 -- Plant Cap: $275.5 mil; CAW Cap: $106.875 mil
AFUDC: 2.46%; Debt coverage: 1.00;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	a	b	c	d	e	f	g	h	i	j
1	8.67%	$74,090,000	$ 144,500,509	105.23%	$ 8,189	8.67%	$81,940,000	$152,350,509	116.37%	$ 9,081
2	6.00%	$59,020,000	$ 129,430,509	83.82%	$ 6,477	6.00%	$62,070,000	$132,480,509	88.15%	$ 6,823
3	6.00%	$55,880,000	$ 126,290,509	79.36%	$ 6,119	6.00%	$58,450,000	$128,860,509	83.01%	$ 6,412
4	5.00%	$51,820,000	$ 122,230,509	73.60%	$ 5,658	5.00%	$53,460,000	$123,870,509	75.93%	$ 5,845
5	4.38%	$52,530,000	$ 122,940,509	74.61%	$ 5,739	4.45%	$53,830,000	$124,240,509	76.45%	$ 5,886
6	3.77%	$49,880,000	$ 120,290,509	70.84%	$ 5,437	3.77%	$50,070,000	$120,480,509	71.11%	$ 5,459

Notes

1
- 1 Issuance @ 8.67%; No SRF
- 1 Issuance @ 6%; No SRF
- 2 Issuances @ 6%; No SRF
- 3 Issuances @ 5%; No SRF
- 2 Issuances @ 6%; 1 SRF ($150 mil)
- 3 Issuances @ 5%; 2 SRF($110 & $40 mil)

2 Weighted average cost of debt.

3 Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.

4 Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509

5 CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.

Table 2a: Scenario 1 -- Plant Cap: $227.3 mil; CAW Cap: $95.0 Mil;
AFUDC: 2.46%; Debt coverage: 1.25;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	a	b	c	d	e	f	g	h	i	j
1	8.67%	$73,530,000	$143,940,509	104.43%	$ 8,153	8.67%	$ 81,630,000	$152,040,509	115.93%	$ 9,074
2	6.00%	$57,980,000	$128,390,509	82.35%	$ 6,386	6.00%	$ 59,540,000	$129,950,509	84.56%	$ 6,563
3	6.00%	$54,750,000	$125,160,509	77.76%	$ 6,020	6.00%	$ 57,410,000	$127,820,509	81.54%	$ 6,322
4	5.00%	$50,900,000	$121,310,509	72.29%	$ 5,582	5.00%	$ 52,250,000	$122,660,509	74.21%	$ 5,735
5	4.31%	$50,660,000	$121,070,509	71.95%	$ 5,555	4.38%	$ 51,640,000	$122,050,509	73.34%	$ 5,666
6	3.67%	$48,250,000	$118,660,509	68.53%	$ 5,281	3.68%	$ 48,630,000	$119,040,509	69.07%	$ 5,324

Notes

1
- 1 Issuance @ 8.67%; No SRF
- 1 Issuance @ 6%; No SRF
- 2 Issuances @ 6%; No SRF
- 3 Issuances @ 5%; No SRF
- 2 Issuances @ 6%; 1 SRF ($150 mil)
- 3 Issuances @ 5%; 2 SRF($110 & $40 mil)

2 Weighted average cost of debt.

3 Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.

4 Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509

5 CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.

Table 2b: Scenario 2 -- Plant Cap: $275.5 mil; CAW Cap: $106.875 mil
AFUDC: 2.46%; Debt coverage: 1.25;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	k	l	m	n	o	p	q	r	s	t
1	8.67%	$85,200,000	$ 155,610,509	121.00%	$ 9,452	8.67%	$95,010,000	$ 165,420,509	134.94%	$ 10,566
2	6.00%	$66,350,000	$ 136,760,509	94.23%	$ 7,309	6.00%	$70,180,000	$ 140,590,509	99.67%	$ 7,744
3	6.00%	$62,430,000	$ 132,840,509	88.67%	$ 6,864	6.00%	$65,650,000	$ 136,060,509	93.24%	$ 7,229
4	5.00%	$57,360,000	$ 127,770,509	81.47%	$ 6,288	5.00%	$59,410,000	$ 129,820,509	84.38%	$ 6,521
5	4.38%	$58,260,000	$ 128,670,509	82.74%	$ 6,390	4.45%	$59,880,000	$ 130,290,509	85.04%	$ 6,574
6	3.77%	$54,940,000	$ 125,350,509	78.03%	$ 6,013	3.77%	$55,170,000	$ 125,580,509	78.35%	$ 6,039

Notes

1
- 1 Issuance @ 8.67%; No SRF
- 1 Issuance @ 6%; No SRF
- 2 Issuances @ 6%; No SRF
- 3 Issuances @ 5%; No SRF
- 2 Issuances @ 6%; 1 SRF ($150 mil)
- 3 Issuances @ 5%; 2 SRF($110 & $40 mil)

2 Weighted average cost of debt.

3 Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.

4 Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509

5 CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.

Table 3a: Scenario 1 -- Plant Cap: $227.3 mil; CAW Cap: $95.0 Mil;
AFUDC: 8.4%; Debt coverage: 1.00;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	a	b	c	d	e	f	g	h	i	j
1	8.67%	$64,600,000	$135,010,509	91.75%	$ 7,136	8.67%	$ 71,080,000	$141,490,509	100.95%	$ 7,872
2	6.00%	$52,170,000	$122,580,509	74.09%	$ 5,723	6.00%	$ 54,690,000	$125,100,509	77.67%	$ 6,010
3	6.00%	$49,570,000	$119,980,509	70.40%	$ 5,427	6.00%	$ 51,700,000	$122,110,509	73.43%	$ 5,669
4	5.00%	$46,500,000	$116,910,509	66.04%	$ 5,079	5.00%	$ 47,570,000	$117,980,509	67.56%	$ 5,200
5	4.01%	$46,310,000	$116,720,509	65.77%	$ 5,057	4.08%	$ 47,080,000	$117,490,509	66.87%	$ 5,145
6	3.49%	$44,380,000	$114,790,509	63.03%	$ 4,838	3.51%	$ 44,690,000	$115,100,509	63.47%	$ 4,873

Notes

1
- 1 Issuance @ 8.67%; No SRF
- 1 Issuance @ 6%; No SRF
- 2 Issuances @ 6%; No SRF
- 3 Issuances @ 5%; No SRF
- 2 Issuances @ 6%; 1 SRF ($150 mil)
- 3 Issuances @ 5%; 2 SRF($110 & $40 mil)

2 Weighted average cost of debt.

3 Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.

4 Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509

5 CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.

Table 3b: Scenario 2 -- Plant Cap: $275.5 mil; CAW Cap: $106.875 mil
AFUDC: 8.40%; Debt coverage: 1.00;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	k	l	m	n	o	p	q	r	s	t
1	8.67%	$74,350,000	$ 144,760,509	105.60%	$ 8,215	8.67%	$82,200,000	$152,610,509	116.74%	$ 9,107
2	6.00%	$59,280,000	$ 129,690,509	84.19%	$ 6,502	6.00%	$62,330,000	$132,740,509	88.52%	$ 6,849
3	6.00%	$56,140,000	$ 126,550,509	79.73%	$ 6,145	6.00%	$58,710,000	$129,120,509	83.38%	$ 6,438
4	5.00%	$52,080,000	$ 122,490,509	73.97%	$ 5,684	5.00%	$53,720,000	$124,130,509	76.30%	$ 5,870
5	4.38%	$52,080,000	$ 122,490,509	73.97%	$ 5,684	4.45%	$54,090,000	$124,500,509	76.82%	$ 5,912
6	3.77%	$50,140,000	$ 120,550,509	71.21%	$ 5,463	3.77%	$50,330,000	$120,740,509	71.48%	$ 5,485

Notes

1	1	1 Issuance @ 8.67%; No SRF
	2	1 Issuance @ 6%; No SRF
	3	2 Issuances @ 6%; No SRF
	4	3 Issuances @ 5%; No SRF
	5	2 Issuances @ 6%; 1 SRF ($150 mil)
	6	3 Issuances @ 5%; 2 SRF($110 & $40 mil)
2	Weighted average cost of debt.	
3	Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.	
4	Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509	
5	CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.	

Table 4a: Scenario 1 -- Plant Cap: $227.3 mil; CAW Cap: $95.0 Mil;
AFUDC: 8.4%; Debt coverage: 1.25;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	a	b	c	d	e	f	g	h	i	j
1	8.67%	$73,760,000	$144,170,509	104.76%	$ 8,176	8.67%	$ 81,860,000	$152,270,509	116.26%	$ 9,097
2	6.00%	$58,220,000	$128,630,509	82.69%	$ 6,410	6.00%	$ 61,370,000	$131,780,509	87.16%	$ 6,768
3	6.00%	$54,990,000	$125,400,509	78.10%	$ 6,044	6.00%	$ 57,640,000	$128,050,509	81.86%	$ 6,344
4	5.00%	$51,130,000	$121,540,509	72.62%	$ 5,605	5.00%	$ 52,490,000	$122,900,509	74.55%	$ 5,759
5	4.01%	$50,900,000	$121,310,509	72.29%	$ 5,579	4.08%	$ 51,870,000	$122,280,509	73.67%	$ 5,689
6	3.51%	$48,490,000	$118,900,509	68.87%	$ 5,305	3.51%	$ 48,870,000	$119,280,509	69.41%	$ 5,348

Notes

1	1	1 Issuance @ 8.67%; No SRF
	2	1 Issuance @ 6%; No SRF
	3	2 Issuances @ 6%; No SRF
	4	3 Issuances @ 5%; No SRF
	5	2 Issuances @ 6%; 1 SRF ($150 mil)
	6	3 Issuances @ 5%; 2 SRF($110 & $40 mil)
2	Weighted average cost of debt.	
3	Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.	
4	Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509	
5	CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.	

Table 4b: Scenario 2 -- Plant Cap: $275.5 mil; CAW Cap: $106.875 mil
AFUDC:8.40%; Debt coverage: 1.25;

	Construction Period: 3.5 Yrs.					Construction Period: 4.5 Yrs				
		2015 Revenue Reqts.			CAW		2015 Revenue Reqts.			CAW
Financing Option [1]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]	Financing Rate [2]	For Plant Addition	Total Revenue Reqts. [3]	Increase due to Plant Addition [4]	Cost of Water [5]
	%	$	$	%	$/AF	%	$	$	%	$/AF
	k	l	m	n	o	p	q	r	s	t
1	8.67%	$85,460,000	$ 155,870,509	121.37%	$ 9,477	8.67%	$95,270,000	$ 165,680,509	135.31%	$ 10,592
2	6.00%	$66,610,000	$ 137,020,509	94.60%	$ 7,335	6.00%	$70,440,000	$ 140,850,509	100.04%	$ 7,770
3	6.00%	$62,690,000	$ 133,100,509	89.04%	$ 6,890	6.00%	$65,910,000	$ 136,320,509	93.61%	$ 7,255
4	5.00%	$57,620,000	$ 128,030,509	81.83%	$ 6,313	5.00%	$59,670,000	$ 130,080,509	84.75%	$ 6,546
5	4.38%	$58,520,000	$ 128,930,509	83.11%	$ 6,416	4.45%	$60,140,000	$ 130,550,509	85.41%	$ 6,600
6	3.77%	$55,200,000	$ 125,610,509	78.40%	$ 6,039	3.77%	$55,430,000	$ 125,840,509	78.72%	$ 6,064
Notes										
1	1	1 Issuance @ 8.67%; No SRF								
	2	1 Issuance @ 6%; No SRF								
	3	2 Issuances @ 6%; No SRF								
	4	3 Issuances @ 5%; No SRF								
	5	2 Issuances @ 6%; 1 SRF ($150 mil)								
	6	3 Issuances @ 5%; 2 SRF($110 & $40 mil)								
2	Weighted average cost of debt.									
3	Includes 2015 Revenue requirement of $70,410,509 for no plant addition case based on Unform Financial Model.									
4	Increase due to plant addition = Revenue reqt for plant addition / Reve. Reqt. For plant addition = col. b / $70,410,509									
5	CAW cost of water includes cost of warter at CAW source plus Transportation Costs plus CAW facilities.									

(END OF APPENDIX D)

APPENDIX E
********** SERVICE LIST**********
Last Updated on 19-OCT-2010 by: RC4
A0409019 LIST

********** **PARTIES** **********

Russell Mcglothlin
RYAN C. DRAKE
Attorney At Law
BROWNSTEIN HYATT FARBER SCHRECK
21 E. CARRILLO STREET
SANTA BARBARA CA 93101
(805) 453-2955
rmcglothlin@bhfs.com
For: Cities of Seaside, Sand City, Carmel by the Sea and Pacific Grove

---

George Riley
CITIZENS FOR PUBLIC WATER
1198 CASTRO ROAD
MONTEREY CA 93940
(831) 645-9914
georgeriley@hotmail.com
For: Citizen for Public Water

Deborah Mall
CITY OF MONTEREY
CITY HALL, CITY ATTORNEY'S OFFICE
399 MADISON STREET
MONTEREY CA 93940
(831) 646-3915
mall@ci.monterey.ca.us
For: City of Monterey

David C. Laredo
Attorney At Law
DE LAY & LAREDO
606 FOREST AVENUE
PACIFIC GROVE CA 93950-4221
(831) 646-1502
dave@laredolaw.net
For: MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Dan L. Carroll
Attorney At Law
DOWNEY BRAND, LLP
621 CAPITOL MALL, 18TH FLOOR
SACRAMENTO CA 95814

Mark Fogelman
STEPHANI A. ELKINS / DERRICK N.D. HANSEN
FRIEDMAN DUMAS & SPRINGWATER, LLP
150 SPEAR STREET, SUITE 1600
SAN FRANCISCO CA 94105
(415) 834-3812
mfogelman@friedumspring.com
For: Marina Coast Water District

Sarah E. Leeper
Attorney At Law
MANATT, PHELPS & PHILLIPS, LLP
ONE EMBARCADERO CENTER, 30TH FLOOR
SAN FRANCISCO CA 94111
(415) 291-7461
sleeper@manatt.com
For: California American Water

Monica L. McCrary
JASON ZELLER
Legal Division
RM. 5134
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-1288
mlm@cpuc.ca.gov
For: DRA

Patricia Nelson
PUBLIC TRUST ALLIANCE, RESOURCE RENEWAL
BUILDING D, FORT MASON, ROOM 290
SAN FRANCISCO CA 94123
(415) 497-1147
nelsonp34@hotmail.com
For: The Public Trust Alliance

Sabrina V. Teller
Attorney At Law
REMY THOMAS MOOSE & MARLEY, LLP
455 CAPITOL MALL, STE. 210
SACRAMENTO CA 95814
(916) 443-2745
steller@rtmmlaw.com
For: Monterey Regional Water Pollution Control Agency

---

(916) 444-1000
dcarroll@downeybrand.com
For: Monterey County Water Resources Agency

Sabrina D. Venskus
A Professional Law Corporation
VENSKUS & ASSOCIATES
21 SOUTH CALIFORNIA STREET, SUITE 204
VENTURA CA 93001
(805) 641-0247
venskus@lawsv.com
For: Surfrider Foundation

********** **STATE EMPLOYEE** **********

Peter V. Allen
Legal Division
RM. 5031
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-2195
pva@cpuc.ca.gov

Andrew Barnsdale
Energy Division
AREA 4-A
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-3221
bca@cpuc.ca.gov

Diana Brooks
Division of Ratepayer Advocates
RM. 4208
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-1445
dsb@cpuc.ca.gov

Max Gomberg
Division of Ratepayer Advocates
RM. 4208
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-2002
mzx@cpuc.ca.gov

Steven Kasower
1720 Q STREET
SACRAMENTO CA 95814
(916) 442-1477
steve@seacompany.org

Laura L. Krannawitter
Division of Ratepayer Advocates
320 WEST 4TH STREET SUITE 500
Los Angeles CA 90013
(213) 576-7045
llk@cpuc.ca.gov

Mike Miller
Division of Water and Audits
AREA 3-C
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 355-5584
mml@cpuc.ca.gov

Angela K. Minkin
Administrative Law Judge Division
RM. 5017
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-1573
ang@cpuc.ca.gov

Pamela Nataloni
Legal Division
RM. 5124
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-4132
jpn@cpuc.ca.gov

Jonathan J. Reiger
Executive Division
RM. 5035
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 355-5596
jzr@cpuc.ca.gov

Nihar Shah
Division of Ratepayer Advocates
RM. 4209
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-5251
nks@cpuc.ca.gov

Joyce Steingass
Division of Ratepayer Advocates
RM. 4209
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 355-5532

Ravi Kumra
Division of Water and Audits
AREA 3-C
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-2571
rkk@cpuc.ca.gov

Richard rauschmeier
Division of Ratepayer Advocates
RM. 3200
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-2732
rra@cpuc.ca.gov

********* **INFORMATION ONLY** **********

Tanya A. Gulesserian
Attorney At Law
ADAMS BROADWELL JOSEPH & CARDOZO
601 GATEWAY BLVD. STE 1000
SOUTH SAN FRANCISCO CA 94080
(650) 589-1660
tgulesserian@adamsbroadwell.com

Alan B. Lilly
Attorney At Law
BARTKIEWICZ, KRONICK & SHANAHAN
1011 22ND STREET, SUITE 100
SACRAMENTO CA 95816-4907
(916) 446-4254
abl@bkslawfirm.com

Gregory K. Wilkinson
BEST BEST & KRIEGER, LLP
3750 UNIVERSITY AVE., SUITE 400
RIVERSIDE CA 92501
(951) 686-1450
Gregory.Wilkinson@bbklaw.com
For: Ocean Mist Farming Company

Jason M. Ackerman
BEST BEST & KRIEGER, LLP
3750 UNIVERSITY AVENUE, SUITE 400
RIVERSIDE CA 92501
(951) 686-1450
jason.Ackerman@bbklaw.com

Carrie Gleeson
CALIFORNIA AMERICAN WATER
1033 B AVENUE, SUITE 200
CORONADO CA 92118

jws@cpuc.ca.gov

Cynthia J. Truelove
Policy & Planning Division
RM. 5119
505 VAN NESS AVENUE
San Francisco CA 94102 3298
(415) 703-1764
cjt@cpuc.ca.gov

David P. Stephenson
CALIFORNIA AMERICAN WATER
4701 BELOIT DRIVE
SACRAMENTO CA 95838
(916) 568-4222
dstephen@amwater.com
For: California American Water

John Klein
CALIFORNIA AMERICAN WATER
PO BOX 951
MONTEREY CA 93942
(831) 646-3273
john.klein@amwater.com

Tim Miller
Attorney At Law
CALIFORNIA AMERICAN WATER
1033 B AVENUE, SUITE 200
CORONADO CA 92118
(619) 435-7410
tim.miller@amwater.com

Robert G. Maclean
President
CALIFORNIA AMERICAN WATER COMPANY
1033 B AVENUE, SUITE 200
CORONADO CA 92118
(619) 435-7401
robert.maclean@amwater.com
For: California American Water

CALIFORNIA ENERGY MARKETS
425 DIVISADERO STREET, SUITE 303
SAN FRANCISCO CA 94117
(415) 963-4439
cem@newsdata.com

Manuel G. Fierro
CITIZEN FOR PUBLIC WATER
410 LINE STREET
MONTEREY CA 93940
(831) 373-1167
manuelfierro02@yahoo.com

(619) 435-7411
carrie.gleeson@amwater.com

Catherine A. Bowie
Manager External Afffairs
CALIFORNIA AMERICAN WATER
PO BOX 951
MONTEREY CA 93942
(831) 646-3206
catherine.bowie@amwater.com

Frances M. Farina
DE LAY & LAREDO
389 PRINCETON AVENUE
SANTA BARBARA CA 93111-1637
(805) 681-8822
ffarina@cox.net

Heidi Quinn
DELAY & LAREDO
606 FOREST AVENUE
PACIFIC GROVE CA 93950
heidi@laredolaw.net

Kevin M. O'Brien
Attorney At Law
DOWNEY BRAND LLP
621 CAPITOL MALL, 18TH FLOOR
SACRAMENTO CA 95814
(916) 444-1000
kobrien@downeybrand.com

Eric Zingas
ENVIRONMENTAL SCIENCE ASSOCIATES/WATER
225 BUSH STREET
SAN FRANCISCO CA 94104
(415) 896-5900
ezigas@esassoc.com

Derrick N.D. Hansen
FRIEDMAN DUMAS & SPRINGWATER, LLP
150 SPEAR STREET, SUITE 1600
SAN FRANCISCO CA 94105
(415) 834-3800
dhansen@friedumspring.com

Stefanie A. Elkins
FRIEDMAN DUMAS & SPRINGWATER, LLP
150 SPEAR STREET, SUITE 1600
SAN FRANCISCO CA 94105
(415) 834-3800
selkins@friedumspring.com

Glen Stransky
HIDDEN HILLS SUBUNIT RATEPAYERS ASSOC.
92 SADDLE ROAD

Christine Davi
CITY OF MONTEREY
CITY HALL
399 MADISON STREET
MONTEREY CA 93940
(831) 646-3915
davi@ci.monterey.ca.us
For: City of Monterey

Nancy Isakson
Government Affairs Consultant
PO BOX 804
CARMEL CA 93920
(831) 224-2879
nisakson@mbay.net

Molly Erickson
LAW OFFICES OF MICHAEL W. STAMP
479 PACIFIC STREET, SUITE ONE
MONTEREY CA 93940
erickson@stamplaw.us

Lenard G. Weiss
Attorney At Law
MANATT, PHELPS & PHILLIPS, LLP
ONE EMBARCADERO CENTER, 30TH FLOOR
SAN FRANCISCO CA 94111
(415) 291-7460
lweiss@manatt.com
For: California American Water Company

Lori Ann Dolqueist
Attorney At Law
MANATT, PHELPS & PHILLIPS, LLP
ONE EMBARCADERO CENTER, 30TH FLOOR
SAN FRANCISCO CA 94111
(415) 291-7400
ldolqueist@manatt.com

James Heitzman
MARINA COAST WATER DISTRICT
11 RESERVATION RD
MARINA CA 93940
(831) 883-5938
jim@mcwd.org

Bob Mckenzie
375 SPENCER STREET, NO 1
MONTEREY CA 93940
(831) 642-9809
bobmac@qwest.net

Jerry Gallego

CARMEL VALLEY CA 93924
(831) 695-2119
Glen.Stransky@LosLaurelesHOA.com
For: Hidden Hills Subunit Ratepayers Assn.

Andrew M. Bell
MONTEREY PENINSULA WATER MGMNT. DIST.
EMAIL ONLY
EMAIL ONLY CA 00000-0000
(831) 658-5620
andy@mpwmd.dst.ca.us

Darby W. Fuerst
General Manager
MONTEREY PENINSULA WATER MNGMNT DIST
PO BOX 85
187 EL DORADO STREET
MONTEREY CA 93942-0085
(831) 658-5651
darby@mpwmd.dst.ca.us

Robert B. Holden
Control Agency
MONTEREY REGIONAL WATER POLLUTION
5 HARRIS COURT, BLDG. D
MONTEREY CA 93940
(831) 645-4634
bobh@mrwpca.com

Joyce Ambrosius
NOAA'S NATIONAL MARINE FISHERIES SERVICE
777 SONOMA AVENUE, ROOM 325
SANTA ROSA CA 95404
(707) 575-6064
joyce.ambrosius@noaa.gov

Lloyd W. Lowrey, Jr.
CHRISTINE KEMP
Attorney At Law
NOLAND, HAMERLY, ETIENNE & HOSS
PO BOX 2510; 333 SALINAS STREET
SALINAS CA 92902
(831) 424-1414
llowrey@nheh.com
For: Marina Coast Water District

Stephen Collins
OCEAN MIST
26153 LEGENDS COURT
MONTEREY COUNTY CIVIL GRAND JURY
15790 HORIZON WAY
PRUNEDALE CA 93907

Curtis V. Weeks
MONTEREY COUNTY WATER RESOURCES AGENCY
PO BOX 930
SALINAS CA 93902
(831) 755-8906
weeksc@co.monterey.ca.us

Michael Warburton
PUBLIC TRUST ALLIANCE
290 BLDG. D, FORT MASON
SAN FRANCISCO CA 94123
(510) 655-0752
michael@rri.org

Tyla Montgomery
RBF CONSULTING
9755 CLAIREMONT MESA BLVD. STE. 100
SAN DIEGO CA 92124-1324
(858) 614-5000
tmontgomery@rbf.com

Lyndel Melton
RMC WATER & ENVIRONMENT
2001 N. MAIN STREET, SUITE 400
WALNUT CREEK CA 94596
(925) 627-4100
lmelton@rmcwater.com

Conner Everts
SOUTHERN CALIFORNIA WATERSHED ALLIANCE
2515 WILSHIRE BLVD.
SANTA MONICA CA 90403
(310) 829-1229
connere@west.net

Joe Geever
Southern California Manager
SURFRIDER FOUNDATION
8117 W. MANCHESTER AVE 297
PLAYA DEL REY CA 90293
(310) 410-2890
jgeever@surfrider.org

Sarah Corbin
Central California Regional Manager
SURFRIDER FOUNDATION
809 BROWNS VALLEY ROAD
WATSONVILLE CA 95076
(831) 239-1520
scorbin@surfrider.org

SALINAS CA 93908
(831) 970-0577
stecllns@aol.com

Stan Williams
POSEIDON WATER
111 NORTH MARKET STREET, SUITE 300
SAN JOSE CA 95113
(408) 332-5819
swilliams@poseidon1.com
For: Pajaro/Sunny Mesa Community Services District

(END OF APPENDIX E)

Dissent of Commissioner Dian M. Grueneich

December 2, 2010 Business Meeting, Agenda ID# 3265, Item 41a

I support item 41, ALJ Minkin's proposed decision issuing a certificate of public convenience and necessity for the coastal water project and approving, with modifications, a settlement agreement proposed by California-American Water and its partners. I do not support Commissioner Bohn's alternate, item 41a, which approves without modification the same settlement agreement.

ALJ Minkin's proposed decision and commissioner Bohn's alternate have much in common:

- Both decisions approve the coastal water project -- including a reverse osmosis desalination plant, source water wells, and associated transmission and distribution facilities -- to address long standing water constraints on the Monterey peninsula;
- Both decisions fulfill the requirements of the California environmental quality act, advancing the most environmentally sensitive solution;
- Both decisions empower an innovative public-private partnership between Cal-American water and local public agencies.

I agree with the judgment of both decisions in these areas.

There is, however, one critical distinction between ALJ Minkin's proposed decision and Commissioner Bohn's alternate: the alternate forfeits the requirement for this commission to review the cost of financing, operating, and maintaining the coastal water project.

Because coastal water project costs are uncertain and will be paid completely by Cal-Am's Monterey district ratepayers, this critical omission means that this commission cannot fulfill its constitutional and statutory

obligation to ensure that these costs are reasonably incurred and that the resulting rates are therefore, just and reasonable.

The alternate justifies its abandonment of these duties on the grounds that cal-am ratepayers are protected by procedural, contractual, and other safeguards contained in the parties' agreement and various statutes governing the public partners. I am unpersuaded by this argument. We are not at liberty to waive or delegate our legal responsibility to ensure just and reasonable rates to cal-am and it's partners; those duties rest solely with this commission. Indeed, the notion that this agency can and should delegate its oversight responsibilities to the very utilities that we are required to regulate calls into question our commitment to upholding this institution's constitutional obligations.

As such, the Commission must review the financing, operating, and maintenance costs of this project and ensure Cal-Am's ratepayers have been effectively represented.

ALJ Minkin's proposed decision appropriately requires Cal-Am to file and serve the project's financing plan for commission review and establishes a subsequent proceeding to review operating and maintenance costs. These requirements are altogether reasonable and necessary. They provide the commission an opportunity to fulfill its obligations to Cal-Am's ratepayers without imposing undue burden on the project's development.

For these reasons I support ALJ Minkin's proposed decision and oppose commissioner's Bohn's alternate proposed decision. I will reserve my right to file a dissent on item 41a.