

This meeting is not subject to
Brown Act noticing requirements.
The agenda is subject to change.



**Water Supply
Planning Committee
Members:**

*Robert S. Brower, Sr.
Chair
Jeanne Byrne
David Pendergrass*

Alternate:

Kristi Markey

Staff Contact

*David J. Stoldt,
General Manager*

*After staff reports have
been distributed, if
additional documents are
produced by the District
and provided to the
Committee regarding any
item on the agenda, they
will be made available at
5 Harris Court, Building
G, Monterey, CA during
normal business hours.
In addition, such
documents may be posted
on the District website at
mpwmd.net. Documents
distributed at
the meeting will be made
available in the same
manner.*

**AGENDA
Water Supply Planning Committee
Of the Monterey Peninsula Water Management District**

Tuesday, July 28, 2015, 9 am
MPWMD Conference Room, 5 Harris Court, Bldg. G, Monterey, CA

Call to Order

Comments from Public

*The public may comment on any item within the District's jurisdiction. Please limit
your comments to three minutes in length.*

Action Items – Public comment will be received

1. Consider Adoption of May 21, 2015 Committee Meeting Minutes
2. Consider Development of Recommendation to the Board of Directors on Agreement with California American Water for Los Padres Dam Long-Term Plan

Discussion Item – Public comment will be received

3. Discuss Process to Become Groundwater Sustainability Agency within Jurisdiction of MPWMD
4. Update on Pure Water Monterey Project
5. Update on California American Water Desalination Plant
6. Update on Local Water Projects
7. Update on Alternative Desalination Project

Suggestions from the Public on Water Supply Project Alternatives (15 min limit)

Set Next Meeting Date

Adjournment

Upon request, MPWMD will make a reasonable effort to provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. MPWMD will also make a reasonable effort to provide translation services upon request. Please send a description of the requested materials and preferred alternative format or auxiliary aid or service by 5PM on July 23, 2015. Requests should be sent to the Board Secretary, MPWMD, P.O. Box 85, Monterey, CA, 93942. You may also fax your request to the Administrative Services Division at 831-644-9560, or call 831-658-5600.

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WATER SUPPLY PLANNING COMMITTEE**ITEM: ACTION ITEM****1. CONSIDER ADOPTION OF MAY 21, 2015 COMMITTEE MEETING MINUTES**

Meeting Date: July 28, 2015

From: David J. Stoldt,
General Manager

Prepared By: Arlene Tavani

SUMMARY: Attached as **Exhibit 1-A** are draft minutes of the May 21, 2015 Water Supply Planning Committee meeting.

RECOMMENDATION: The Committee should review the minutes and adopt them by motion.

EXHIBITS

1-A Draft Minutes of the May 21, 2015 Committee Meeting



EXHIBIT 1-A

DRAFT MINUTES Water Supply Planning Committee of the Monterey Peninsula Water Management District May 21, 2015

Call to Order The meeting was called to order at 9:03 am 2511 Garden Road, Suite B-100, Monterey, CA.

Committee members present: Robert S. Brower, Sr. - Committee Chair
David Pendergrass
Jeanne Byrne

Committee members absent: None

Staff members present: David Stoldt, General Manager
Joe Oliver, Water Resources Division Manager
Arlene Tavani, Executive Assistant

Comments from the Public

Luke Coletti expressed concern that the 125 acre-feet of entitlement water from Pacific Grove's proposed wastewater reclamation project has not been proven as feasible. Although this project is described as a water conservation effort, it is actually a move to create water for growth. He expressed this opinion to the State Water Resources Control Board, and they appreciated the information. He stated that the issue of obtaining new water entitlements while the community is subject to the Cease and Desist Order (CDO) should be completely transparent.

Action Items

1. **Consider Adoption of March 17, 2015 Committee Meeting Minutes**
On a motion by Pendergrass and second of Byrne, the minutes of the March 17, 2015 meeting were approved unanimously on a vote of 3 – 0 by Pendergrass, Byrne and Brower.

Discussion Items

2. **Discuss Process to Become Groundwater Sustainability Agency within Jurisdiction of MPWMD**
Stoldt reviewed the process for establishment of a Groundwater Sustainability Agency (GSA). The area of jurisdiction would be the Water Management District boundary. Work does need to be done to define the boundaries of the groundwater basins within the District. The Water Management District considers the Seaside Groundwater Basin to be distinct and separate from the Salinas Valley Groundwater Basin; however, the Department of Water Resources (DWR) views them as one groundwater basin. The State Water Resources Control Board (SWRCB) views the Carmel Valley Alluvial

Aquifer as surface water flowing in a subterranean channel; however, the DWR views it as a groundwater aquifer. For the initial filing with the state, the District could define the Carmel Valley Alluvial Aquifer as referenced in DWR Bulletin 118. For the Seaside Goundwater Basin, the Water Management District could cite the portion of the basin within its boundaries. Oliver warned that DWR Bulletin 118 incorrectly defines the Seaside Basin. In 2009 the Water Management District submitted correcting information to DWR, but they took no action. Since then, DWR has established a process for amending the boundaries and that could affect plans to establish a GSA. Laredo noted that the Seaside Basin Watermaster is not eligible to serve as a GSA. Stoldt stated that the Water Management District will contact the Watermaster about the GSA, and coordinate on state mandated groundwater reporting requirements. At a future committee meeting, staff will present a draft resolution establishing the GSA. If a Salinas Valley GSA is formed, a joint powers authority would likely be established and the Water Management District would request membership.

3. Discuss 10-Year Forecast of Water Supply Charge Needs and Potential Uses

Stoldt reviewed the project expenditures listed in Exhibit 3-A of the committee packet. He explained that the GWR Operating Reserve shown is a fund that would accumulate approximately \$6 million to pay financing costs in the event that plant operations are temporarily halted and there are no water sales to cover those costs. The drought reserve category would be set aside to pay for water that would accumulate for use during a drought. Cal-Am will not fund production of water that is not sold, so accounts need to be established for the Operations Reserve and Drought Reserve. A public bond issue will include a reserve fund to cover debt service, but it would not have a reserve to cover fixed O&M costs. Exhibit 3-A reflects the assumption that the Water Management District would not obtain public bond monies, but instead would receive state revolving funds that cannot be used to fund reserves. Once the Pure Water Monterey Project is approved, financing could be obtained to pay prior expenses covered by the water supply charge. That would allow the Water Management District to replenish its reserves. Also, if the California Superior Court made a final determination in the District's favor on collection of the user fee, additional funds would be available.

During the public comment period, Luke Coletti asked if water from the Aquifer Storage and Recovery project was treated for iron removal before injection or upon recovery. Stoldt responded that the water was treated before injection and again upon recovery.

4. Discuss Action Plan for Los Padres Dam Improvements and Acquisition

Stoldt reported that the dam could be insured for up to \$10 million, which would create an unreasonable risk for the Water Management District if it were to take ownership of the dam. It may be possible that greater coverage is available. In discussions with Rob MacLean, Stoldt was advised that Cal-Am may not consider a transfer of ownership until results of studies underway are available. Therefore, Cal-Am may not be willing to work with the District very soon on expanding dam capacity. The Water Management District's ultimate goal is to take over Los Padres and expand its capacity. That would only be realistic if Los Padres could be dredged, and sediment moved annually at a cost of approximately \$40 million. The committee will continue to discuss this issue at future meetings.

During the public comment period on this item, Luke Coletti stated that an agency could not plan for an event such as the Marble Cone Fire which was the source of extensive siltation at San Clemente Dam.

5. Update on California-American Water Co. Desalination Plant

The committee reviewed action taken at the Monterey Peninsula Water Supply Project Governance Committee meeting regarding the test slant well. Stoldt noted that there is a concern in the community that if return flows are delivered to Zone 2C, they could be utilized by Marina Coast Water to supply the Monterey Downs Project. Stoldt has advised those concerned that agreements could be devised that would prevent the water from being used for new development.

During the public comment period on this item, Luke Coletti inquired about the plan for brine discharge, and if salinity levels will adversely affect the squid fishery. He opined that the discharge modeling method utilized for the EIR was proved to be “bogus” at a hearing before the SWRCB. Stoldt responded that during the summer months, the desal brine will be mixed with reject water from the groundwater replenishment project. The discharge will meet permit requirements.

6. Update on Pure Water Monterey Project

Stoldt provided an update on progress with the project. He stated that the City of Marina must make a decision as to use of its pipeline for the project. Another unresolved issue is if the County of Monterey will be designated as a discharger, and if so, must water from the Blanco drain be treated to drinking water standards. Also, the cost distribution aspects of the project must be developed.

7. Update on Local Water Projects

Stoldt reported that staff is working with the Monterey Peninsula Airport District, Monterey County Fairgrounds, and the City of Pacific Grove on local water projects. The Pebble Beach Company and the City of Seaside have both proposed projects, but there may not be sufficient grant funds for both proposals.

During the public comment period on this item, Luke Coletti stated that the projects funded by Local Water Project grants should focus on water conservation, not new connections that are an “end run” around the CDO. He inquired about the Pebble Beach project at Old Del Monte. Stoldt responded that the Pebble Beach project entails exploratory work on an old well to determine if there is a non-potable supply that could offset potable use.

Suggestions from the Public on Water Supply Project Alternatives

No comments.

Set Next Meeting Date

No date set.

Adjournment – The meeting was adjourned at 10:30 am.

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WATER SUPPLY PLANNING COMMITTEE

ITEM: ACTIONS ITEM

2. CONSIDER DEVELOPMENT OF RECOMMENDATION TO THE BOARD OF DIRECTORS ON AGREEMENT WITH CALIFORNIA AMERICAN WATER FOR LOS PADRES DAM LONG-TERM PLAN

Meeting Date: July 28, 2015

From: Dave Stoldt,
General Manager

Prepared By: Larry Hampson

SUMMARY: Cal-Am's 2015-17 General Rate Case (GRC) includes received approval by the California Public Utilities Commission for Cal-Am to co-fund up to \$1 million for MPWMD to complete a detailed feasibility study to determine the ultimate fate of Los Padres Dam. The proposed scope of work for the agreement includes the following studies:

- 1. Upstream Volitional Steelhead Passage – All Life Stages**
- 2. Water Availability Analyses**
- 3. Analysis of Carmel River Flow and Steelhead Habitat**
- 4. Analysis of the Geomorphic Effects of Sediment Releases**

A draft reimbursement agreement between the District and Cal-Am is attached as **Exhibit 2-A**. The proposed studies will provide a scientific basis to address concerns raised by the National Marine Fisheries Service about the dam and to answer the question posed by Cal-Am of "Is the Carmel River and the steelhead fishery better off with or without Los Padres Dam and Reservoir." In addition, the Water Supply Planning Committee has previously focused on the need to regulate the Carmel River during the dry season in order to provide flow for steelhead habitat and water supply uses downstream of Los Padres Dam (LPD or LP Dam). In particular, the Committee has suggested that the dam and reservoir be improved to increase available water supply.

RECOMMENDATION: The Committee should review the draft agreement between the District and Cal-Am and provide a recommendation to the Board and staff concerning: 1) proposed studies to be funded by Cal-Am; and 2) additional tasks that are in the interest of MPWMD to include in a detailed feasibility study.

DISCUSSION: In April 2013, the National Marine Fisheries Service (NMFS) provided the following direction to California American Water (Cal-Am):

"As a first step towards protecting S-CCC steelhead, NMFS strongly encourages CAW to resolve the fish passage and other potential take issues at LPD by completing a thorough feasibility study on the merits of either: 1) entirely removing the dam and restoring the

reservoir area to its original environs; or 2) improving the dam with appropriate permanent fish passage modifications that allow for unimpeded, safe and effective, upstream and downstream migration of all life stages of S-CCC steelhead.”

Subsequently, Cal-Am filed two requests with the CPUC in its 2015-17 General Rate Case to address these issues. The CPUC approved \$4.2 million to construct downstream steelhead passage improvements at Los Padres Dam and directed Cal-Am to co-fund with MWPMMD a detailed feasibility study on the long-term fate of the dam. The downstream steelhead passage improvements are scheduled for construction during the summer of 2015.

In addition to work described in the GRC, if the State Water Resources Control Board (SWRCB) accepts the proposal to modify Cease and Desist Order 2009-0060, Cal-Am would conduct a study of the existing trap and truck operation for adult steelhead at the base of Los Padres Dam to determine if short-term improvements can be made for upstream migration; however, resolving steelhead passage issues for all life stages is complicated by the height of the lift (about 120 feet) as well as the need to pass fish through the existing dam.

GRC Studies

1. Upstream Volitional Steelhead Passage – All Life Stages. At 120 feet in height, Los Padres Dam is comparable to several dams in the Pacific Northwest that have working fish ladders; however, a complicating factor at Los Padres Dam is the relatively wide range of reservoir elevations that can occur. This study would focus on gathering existing topographic and hydrologic data; analyzing feasible alternatives to provide passage; developing a preliminary cost estimate; and establishing Division of Safety of Dams requirements. If construction of a fish ladder is found to be feasible, Cal-Am could include a request to carry out improvements in a future general rate case application.

2. Water Availability Analyses – This study consists of using the proposed GSFLOW model for the Carmel Valley (a linked surface water and groundwater computer model currently under development) to simulate Carmel River flows under different assumptions about surface storage at Los Padres Reservoir and future Cal-Am operations. It is anticipated that several scenarios would be evaluated that range from no surface storage (i.e., the dam removal alternative) to enlargement of surface storage at the site. Analyses would include future Cal-Am operations along the Carmel River with new water supply projects to replace existing unauthorized diversions. The focus would be on generating daily flow data at several points along the river between LP Dam and Highway 1 and comparing the number of days that the river flows (and the flow level) at each point under different assumptions about surface storage and Cal-Am operations. The effect of varying levels of surface storage on flow availability for Aquifer Storage and Recovery and water supply could also be evaluated.

3. Analysis of Carmel River Flow and Steelhead Habitat – This study would complement the water availability analysis by using the output data from that study to compare steelhead habitat conditions under different assumed surface storage volumes and operations scenarios. The District’s Instream Flow Incremental Method study (currently under

development) would be used to evaluate changes in habitat value due to different assumptions about surface storage, releases to the river, and Cal-Am operations.

4. Analysis of the Geomorphic Effects of Sediment Releases – The effect of sediment releases (e.g., from maintenance dredging or dam removal) to the downstream reaches would be qualitatively evaluated. Such effects as erosion, flooding, river meandering and braiding, and habitat change would be considered. The timing, magnitude, and extent of these effects may be key factors in determining whether an increase in sediment load may be feasible.

Additional Studies

Although not explicitly described in the GRC proposal, the long-term liability associated with various alternatives for Los Padres Dam should be evaluated and included when considering a decision about the future of Los Padres Dam. All alternatives for Los Padres Dam, including “do nothing”, dam modification, and dam removal pose significant legal questions and there are varying levels of both benefits and potential liabilities associated with downstream sediment impacts, changes in water quality, changes in water supply, and compliance with various laws including the Endangered Species Act.

EXHIBIT

2-A Draft Implementation Agreement for Los Padres Dam Long-Term Plan Project (I15-400101) Covering Calendar Years 2015 - 2017

EXHIBIT 2-A**Implementation Agreement for
Los Padres Dam Long-Term Plan Project (I15-400101)
Covering Calendar Years 2015 - 2017**

THIS AGREEMENT is effective January 1, 2015, by and between California-American Water Company (California American Water or CAW) and the Monterey Peninsula Water Management District (MPWMD or Water Management District).

1. Recitals.

1.1. The Water Management District was created by the California Legislature in 1977 (Statutes of 1977, Chapter 527, as amended). The California Public Utilities Commission (CPUC or Commission) acknowledged creation of the Water Management District in Decisions 89195 and 92793. Finding 16 of Decision 89195 provides, "The use of Monterey Peninsula water resources and management of such resources can best be accomplished by the responsible local government agencies, coordinated when necessary with California American Water and the Public Utilities Commission." Finding 18 of Decision 89195 also states, "As a result of Assembly Bill 1329 (Chapter 527) and a vote of the electorate in the area served by California American Water's Monterey District, there is now in existence the Monterey Peninsula Water Management District, having very broad powers, including taxing powers."

1.2. CPUC Decision D.15-04-007 (Decision), adopting the 2015, 2016, and 2017 revenue requirement for California American Water, approves the request to co-fund MPWMD so they may pursue on-going efforts and studies to determine the best overall fate for Los Padres Dam (dam) and the Carmel River.

1.3. MPWMD has an interest in a comprehensive analysis before determining the fate of Los Padres Dam. Issues of concern to MPWMD include the potential loss of surface storage that is used to maintain flow in the lower river during the dry season, the continuing effect that retention of sediment has on habitat downstream of the dam, and the potential downstream effects of restoring the natural sediment load,

1.4 CAW has a primary interest in addressing the following directive from the National Marine Fisheries Service (NMFS) conveyed in a letter dated April 23, 2013 (Butler to Svindland):

"The Los Padres Dam (LPD) has been a known fish passage impediment for both upstream and downstream migrating S-CCC steelhead as well as impacting the downstream habitat by blocking the natural sediment supply...As a first step towards protecting S-CCC [South-Central California Coast] steelhead, NMFS strongly encourages CAW to resolve the fish passage and other potential take issues at LPD [Los Padres Dam] by completing a thorough feasibility study on the merits of either: 1) entirely removing the dam and restoring the reservoir area to its original

environs; or 2) improving the dam with appropriate permanent fish passage modifications that allow for unimpeded, safe and effective, upstream and downstream migration of all life stages of S-CCC steelhead.”

1.5 CAW intends to complete installation of downstream fish passage facilities at Los Padres Dam during the summer of 2015 (Decision, 22.5.17 Los Padres Dam Fish Passage Project (05400049)).

1.6. MPWMD shall cooperate with California American Water on a detailed feasibility study “to determine the ultimate fate of the Los Padres Dam” (the Project). CAW will contribute up to \$1,000,000 minus CAW staff time of \$24,000 per year to assist MPWMD. The Decision describes that that the Project shall be expensed as follows: \$200,000 in 2015; \$350,000 in 2016 and \$450,000 in 2017; however, California American Water desires to accelerate study efforts concerning upstream steelhead passage at Los Padres Dam and whether maintaining storage at Los Padres Reservoir improves or degrades steelhead habitat in the Carmel River downstream of Los Padres Dam. Therefore, California American Water agrees to fund up to \$450,000 in 2015 with the balance of the costs expensed in the 2016 and 2017.

2. Project Activities. The MPWMD shall undertake the following activities:

2.1. With input from California American Water, the MPWMD shall develop detailed scopes of work for the studies outlined in Exhibit A.

2.2. The MPWMD shall solicit input from appropriate regulatory agencies such as the California Department of Fish and Wildlife and NMFS on the detailed scopes of work and consultants proposed for completing studies.

2.3 The MPWMD, with input from California American Water, shall select highly qualified consultants to carry out individual studies. Selection may be through a Request for Proposal process and review or by direct contracting with selected consultants. MPWMD and California American Water desire to select consultants who are recognized leaders in their field.

CAW shall undertake the following activities:

2.4 CAW shall provide all company records applicable to the Project including, but not limited to: geotechnical studies; plans (or as-builts) and specifications for the existing fish ladder, downstream fish passage facilities, dam, spillway, plunge pool and appurtenances; topographic maps of Los Padres Dam and Reservoir and surrounding area.

2.5 CAW may request and MPWMD shall grant access to all materials, meetings, and reports associated with the Project.

3. Reporting.

3.1. The Water Management District shall provide a quarterly summary of work completed, with a comparison of the budget and schedule for the Project.

3.2. Any report prepared pursuant to this section may be made available to the public and reviewed by the MPWMD Board at a public meeting.

4. Invoices and Use of Funds.

4.1. The Water Management District shall invoice CAW no more frequently than monthly and no less frequently than quarterly for work completed. Such invoice shall include prior period copies of all invoices received by the Water Management District from its non-employee vendors.

4.2. Unless otherwise provided by this agreement, California American Water shall pay the full amount of the Water Management District's invoice within 30 days of receipt.

4.3. The Water Management District shall use funds received pursuant to this Section 4 exclusively as reimbursement for reasonable and necessary costs incurred to implement the Project as specified herein. The Water Management District shall pay all employees, contractors and other vendors in accordance with the contracts between such parties (including any collective bargaining agreements), California law, or both, as applicable.

4.4. No reimbursement under this agreement shall be made for work completed after December 31, 2017.

5. Records and Subsequent Review by California Public Utilities Commission

5.3. MPWMD shall maintain complete and accurate records in accordance with generally accepted accounting practices for government agencies sufficient to show that funds received pursuant to this Agreement have been used exclusively to pay reasonable and necessary costs incurred to implement the Project. MPWMD shall fully assist and cooperate with California-American in responding to data requests issued by the CPUC regarding the purposes of this Agreement.

6. Performance.

6.1. The MPWMD and California American Water shall meet on an as-needed basis throughout this agreement with the purpose of, among other things, ensuring that no activities performed by the MPWMD under this Agreement are duplicative of activities performed by California American Water or otherwise paid by California American Water's customers unless by their nature an activity requires a cooperative effort.

6.2. In its performance of activities under this Agreement, the Water

Management District shall act as independent contractor and the Water Management District and California American Water are not an agent or employee of the other. California American Water, for its part, agrees to provide access to information in its possession and cooperation of its staff in order to assist MPWMD and its contractor(s) to carry out its responsibilities herein. Any information California American Water provides to MPWMD for the purposes of this agreement marked as "confidential" shall be treated in the same manner as "Confidential Information" is treated under the California American Water-MPWMD Non-Disclosure Agreement dated June 22, 2009. The Water Management District shall have exclusive and complete control over its employees and subcontractors, and shall determine the method of performing the services hereunder.

7. Term, Termination and Survival

7.1. Unless terminated earlier under the subsequent paragraph, this Agreement shall remain in effect until December 31, 2017.

7.2. California American Water may terminate this agreement at its convenience by providing the MPWMD written notice, in the manner specified in Section 10, 30 calendar days prior to the proposed termination date.

7.3. The MPWMD may terminate this agreement at its convenience by providing the California American Water written notice, in the manner specified in Section 10, 90 calendar days prior to the proposed termination date such that California American Water can arrange for alternate performance.

7.4. Any obligation for one party to indemnify another shall survive the termination of this Agreement.

7.5. The obligations under Section 5 shall remain in effect until the expiration of the time California American Water is required to preserve records regarding any aspect of this transaction pursuant to Resolution A-4691 of the California Public Utilities Commission dated July 12, 1977.

8. Disputes and Indemnification

8.1. In the event a dispute arises out of the performance of this Agreement, either party shall, as soon as a conflict is identified, submit a written statement of the conflict to the other party. Within five (5) working days of receipt of such a statement of conflict, the second party will respond and a meeting will be arranged not more than five (5) working days thereafter to arrive at a negotiated settlement or procedure for settlement. If, within twenty (20) working days from the initial filing of a statement of conflict an agreement cannot be reached, the parties agree to submit the matter to non-binding mediation. If meditation is unsuccessful, it is agreed that the dispute may be resolved in a court of law competent to hear this matter. This Agreement shall be construed in accord with California law. The prevailing party shall be awarded costs of suit and attorneys' fees.

8.2. Notwithstanding any other provision of this Agreement, each party shall indemnify, defend, protect, hold harmless, and release the other, any parent or affiliate, and their respective officers, agents, and employees, from and against any and all claims losses, proceedings, damages, causes of action, liability, costs, or expense (including attorney's fees and witness costs) arising from or in connection with, or caused by any negligent act or omission or willful misconduct of such indemnifying party. This indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages or compensation payable to or for the indemnifying party under workers' compensation acts, disability benefit acts, or other employee benefit acts.

8.3. This Agreement shall be construed in accord with California law without reference to conflicts of laws principles.

8.4. The prevailing party shall be awarded costs of suit and attorneys' fees.

9. Amendment and Integration

9.1. This Agreement sets forth the entire understanding of the parties with respect to the subject matter herein. Except as stated herein, there are no other agreements expressed or implied, oral or written, except as set forth herein.

9.2. If, during the course of the work herein contemplated, the need to change the purpose of this Agreement should arise, for whatever reason, whichever party first identifies such need to change shall notify the other party in writing. The authorized representatives of the parties shall meet within seven (7) working days of the date of such notice, to discuss the need for change so identified and to determine if this Agreement should be amended.

9.3. Any changes agreed to shall be documented by duly approved and executed amendments to this Agreement or other means acceptable to both parties.

10. Notices.

10.1. All communications to either party by the other shall be deemed given when made in writing and delivered or mailed to such party at its respective address shown in Paragraph 10.2

10.2. Addresses for Notices

MPWMD:	Monterey Peninsula Water Management District 5 Harris Court, Bldg. G Post Office Box 85 Monterey, California 93942
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California American Water:	Director, Coastal Division
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California-American Water Company
511 Forest Lodge Road, Suite 100
Pacific Grove, California 93950

With a copy to:

Vice President – Legal, Operations
California-American Water Company
1033 B Avenue, Suite 200
Coronado, CA 92118

11. References. This Agreement refers to the following prior documents:

- 11.1. CPUC Decision D.15-04-007, 22.5.18 Los Padres Dam Long-Term Plan Project (I15-400101);

April 23, 2013 letter, NMFS (Butler) to Cal-Am (Svindland) cited as Attachment 8 to Direct Testimony of F. Mark Schubert, P.E., Application A.13-07-002

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement effective as of the day and year first above written.

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

BY: David J. Stoldt
General Manager

CALIFORNIA AMERICAN WATER

BY: Robert MacLean
President

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Exhibit A – Scope of Work

1. Upstream Volitional Steelhead Passage – All Life Stages

The feasibility and cost of building and maintaining facilities to allow volitional upstream passage over Los Padres Dam for all life stages of steelhead shall be evaluated. The study shall include the following:

- Define the feasible range of reservoir elevations and flows over which a ladder or other means of transporting steelhead should function;
- Evaluate and recommend the most effective fish entrance, ladder system, and exit to the reservoir for the flows and reservoir elevations anticipated;
- Provide preliminary designs and specifications sufficient for completion of an AACE Class 4 cost estimate.

2. Water Availability Analyses

MPWMD shall complete a linked surface-groundwater flow model for the Carmel River Basin based on GSFLOW. At a minimum, the following water availability analyses shall be conducted for the following scenarios:

- 1) existing conditions: existing LP reservoir storage (estimate as of 2008), existing Cal-Am diversions/operation in Carmel Valley; MPWMD will cooperate with CAW to develop assumptions for Carmel Valley operations for the short-term (i.e., 2015-2020).
- 2) existing LP reservoir storage, proposed Cal-Am diversions/operations in Carmel Valley with the Monterey Peninsula Water Supply Project completed (i.e., 2020 proposed operation); MPWMD will cooperate with CAW to develop assumptions for proposed 2020 Cal-Am operations;
- 3) existing LP reservoir storage to start, proposed 2020 Cal-Am operations, annual depletion of reservoir storage of 10 to 20 AFY;
- 4) no LP reservoir storage, existing diversions/operation in Carmel Valley;
- 5) no LP reservoir storage, proposed Cal-Am diversions/operation w/ MPWSP;
- 6) enhanced LP reservoir storage (3,030 AF), proposed Cal-Am diversions/operation w/ MPWSP, periodic reservoir maintenance to maintain capacity.

Model runs would be compared for aquifer storage, effects on lagoon openings, extent (or lack) of wetted riverfront, and days that instream flow requirements for steelhead are met.

3. Analysis of Carmel River Flow and Steelhead Habitat

Currently, releases from Los Padres Reservoir augment natural inflows to the main stem below Los Padres Dam and in dry periods these releases are frequently the only significant input to the main stem in the lower 24 miles of the river. Removal of the reservoir would likely significantly affect downstream river habitat during dry periods.

Likewise, increasing reservoir storage could also change habitat for steelhead. In order to study the effect on steelhead of the removal of the dam or an increase in storage, an additional analysis involving evaluation of stream habitat would be conducted.

This second analysis would use the water availability data to analyze the effect on steelhead habitat using a hydraulic model and habitat suitability curves developed with the Instream Flow Incremental Method (IFIM). Effects of the different scenarios on the availability of suitable habitat for adult and juvenile steelhead would be evaluated and compared. However, due to drought conditions, completion of the IFIM for the Carmel River is uncertain. It is anticipated that if enough steelhead are in the river in the winter of 2015-16, an IFIM could be completed by the latter part of 2016.

4. Analysis of Geomorphic Effects of Sediment Releases

Since the winter of 1920-21, when San Clemente Dam was built, all bedload sediment and a portion of the suspended load from the upper watershed has been retained in the two main stem reservoirs. This has resulted in a narrowing of the channel downstream of San Clemente Dam in the alluvial portion of Carmel Valley (the lower 15.5 miles of the river) and “sediment starvation” in the active channel. A geomorphic analysis of the effect of two alternatives would be completed for: 1) bypassing all of the incoming bedload to Los Padres Reservoir (i.e., maintain existing reservoir volume); and 2) bypassing all of the incoming bedload to Los Padres Reservoir and periodically dredging existing reservoir sediment and adding to the bypassed sediment (i.e., steadily increase reservoir volume by increasing the bedload downstream of Los Padres Dam above the natural sediment load). Results would include the following:

- An estimate of the annual bedload and suspended load that would be delivered to the lower 15.5 miles of river;
- A characterization on a reach by reach basis (reaches to be similar to previous studies involving sediment transport) of how the increased sediment load may change 1) the meander belt width (sinuosity), 2) active channel dimensions, 3) vegetation, 4) thalweg, 5) sediment gradation, 6) pool frequency and depth, 7) size and location of gravel bars;
- Timing and magnitude of sediment delivery to the lower 15 miles of the river.

In addition to analyzing downstream effects of an increased sediment load, an investigation would be completed of existing reservoir sediment gradation and an estimate made of the volume of spawning gravel that can be annually dredged. A determination would be made of reservoir sediment areas that can be dredged to provide spawning gravel for placement downstream of Los Padres Dam. The investigation would also include feasible options to create permanent access into the streamside area and a method for placement of spawning material.

An additional task would be to identify feasible options for removing dredged material from the reservoir and either moving the material to a nearby disposal area or placing it downstream of Los Padres Dam and allowing the river to carry the material downstream.

Exhibit B - Budget

Estimated Costs

	Activity	Budget
1	Upstream Steelhead Passage – Existing Ladder	\$ 100,000
2	Upstream Volitional Steelhead Passage – All Life Stages	250,000
3	Water Availability Analyses	100,000
4	Analysis of Carmel River Flow and Steelhead Habitat	250,000
5	Analysis of the Geomorphic Effects of Sediment Releases	200,000
	Contingencies	100,000
	Total	\$ 1,000,000

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