

EXHIBIT 4-B

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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of California-American Water Company (U210W) for Authorization to Increase its Revenues for Water Service by \$18,473,900 or 9.55% in the year 2015, by \$8,264,700 or 3.90% in the year 2016, and by \$6,654,700 or 3.02% in the year 2017.

A.13-07-____
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DIRECT TESTIMONY OF F. MARK SCHUBERT, P.E.

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July 1, 2013

1 **Table 6F: Larkfield District Tank Improvements**

2

Tank Improvement	2015	2016	2017	Total
3 None Planned				
4 Total				

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6 **I. REMOVAL OF LOS PADRES DAM**

7 Q79. Please discuss the potential of removing Los Padres Dam in California American Water's
8 Monterey County District.

9 A79. Yes. As discussed earlier in my testimony, the proposed IP15-400100 Los Padres Dam
10 Feasibility Study will investigate and evaluate the merits of either: 1) entirely removing
11 the dam and restoring the reservoir area to its original environs; or 2) improving the dam
12 with appropriate permanent fish passage modifications that allow for unimpeded, safe and
13 effective, upstream and downstream migration of all life stages of S-CCC steelhead. If
14 the feasibility study concludes that removal of the dam is the best alternative, then it is
15 important to recognize that there will be a significant cost of removal for the dam structure
16 and for the removal of the accumulated sediment in the reservoir itself. While the results
17 of the feasibility study are not yet known, it is critical to acknowledge the potential costs
18 of removing the dam and the accumulated sediment as part of updating the depreciation
19 calculation.

20
21 Q80. What preliminary costs have been developed at this time?

22 A80. Very preliminary costs for the removal of sediment from the Los Padres Dam reservoir
23 have been developed for three alternatives. The first alternative (Alternative # 1) involves
24 removing all the accumulated sediment from the reservoir (estimated at about 1,134 acre-
25 feet, or 1.8 million cubic yards). The estimated cost for Alternative # 1 is about \$100
26 million dollars. Alternative # 2 involves removing accumulated sediment from the upper
27 reach of the reservoir (estimated at about 502 acre-feet, or 0.8 million cubic yards). The
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1 estimated cost for Alternative # 2 is about \$52 million dollars. Alternative # 3 involves
2 removing accumulated sediment from the lower reach of the reservoir (estimated at about
3 558 acre-feet, or about 0.9 million cubic yards). The estimated cost for Alternative # 3 is
4 about \$55 million dollars. It is important to recognize that these preliminary costs do not
5 include any costs associated with removing the dam itself, or the associated restoration
6 costs to the river valley environment.

7
8 Q81. What do you recommend at this time to account for the potential cost associated with
9 removing the Los Padres Dam and the associated sediment?

10 A81. I recommend that the Commission make an adjustment to the depreciation accrual for the
11 utility plant account where the assets for Los Padres dam reside (Account 312 –
12 Collecting and Impounding Reservoirs). More specifically, an increase in the net salvage
13 factor to negative 25 percent is recommended (at a minimum), in order to gradually begin
14 accumulating cost of removal dollars for the Los Padres Dam.

15
16 **J. WATER MAIN RENEWAL USING TRENCHLESS REHABILITATION**
17 **TECHNIQUES**

18 Q82. Please review the compliance item related to California American Water's review of
19 trenchless rehabilitation ("TR") methods/techniques.

20 A82. Yes. California American Water was directed to perform a review of TR methods as a
21 result of the 2010 GRC. First, California American Water continues to be proactive when
22 considering pipeline project improvements and identifying opportunities to implement TR
23 methods. California American Water does recognize that TR methods can reduce
24 community impacts and can reduce pavement replacement costs when considering a
25 pipeline improvement project. Accordingly, California American Water is developing a
26 guideline for identifying TR opportunities for future projects. In addition, a technical
27 memo was prepared to assist in the evaluation of projects to determine if TR is a good fit
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1 efficiency. Emerson's decision to eliminate this line of products leaves California
 2 American Water in the negative predicament of having to search for a replacement, since
 3 Emerson no longer produces this product, and will only continue supporting it for a very
 4 short period of time. This project is scheduled to begin only with design dollars in 2017,
 5 completing design in mid-2018, followed by construction beginning in 2019 and
 6 ultimately being completed by the end of 2020. California American Water recommends
 7 that the Commission approve this IP for the requested dollar amount and the present
 8 timeframe. Additional information, justification, and documentation can be found in the
 9 Capital Investment Project Workpapers for this specific project.

11 **Table 4D. Proposed New Investment Projects for Monterey County Water District**

12 FP #	FP Description	3-Yr Total	2015 Plant Expend.	2016 Plant Expend.	2017 Plant Expend.
13					
14 I15-40090	Booster Station Rehab Program	\$1,500,000	\$300,000	\$700,000	\$500,000
15 I15-40097	Interconnect Satellite Systems with Main Monterey System (Advice Letter Project)	\$3,650,000	\$250,000	\$250,000	\$3,150,000
16 I15-40089	Main Replacement Program	\$5,400,000	\$1,800,000	\$2,800,000	\$800,000
16 I15-40094	Redrill Ralph Lane Well	\$750,000	\$50,000	\$700,000	
17 I15-40091	Service Line Replacement Program	\$1,950,000	\$650,000	\$950,000	\$350,000
18 I15-40092	Valve & PRV Replacement Program	\$900,000	\$200,000	\$450,000	\$250,000
19 I15-40093	Well Rehabilitation Program	\$2,441,000	\$880,000	\$872,000	\$689,000
20 I15-40095	Fire Flow Improvement Program	\$900,000	\$300,000	\$350,000	\$250,000
21 I15-400100	Los Padres Dam Long Term Plan	\$1,000,000	\$200,000	\$350,000	\$450,000
22 I15-40096	SCADA Upgrade Program	\$650,000	\$150,000	\$350,000	\$150,000
23	Total Investment Projects	\$18,391,000	\$4,730,000	\$7,072,000	\$6,589,000

24 Q67. Please discuss the new capital IPs.

25 A67. I provide a summary description of the new capital IPs for the Monterey County Water
 26 District below:

1 **Project Code I15-400100 Los Padres Dam Long-Term Plan**

2 Table 4D shows the requested budget for this IP. This IP is a detailed feasibility study to
3 determine the ultimate fate of the Los Padres Dam. The Los Padres Dam is a 148-foot
4 high earth filled dam with an original storage capacity of 3,030 acre-feet when originally
5 constructed in 1949. The concrete spillway is 600 feet long and has a height of
6 approximately 90 feet. In 1982 a low flow fish barrier was constructed of gabions (rock
7 filled wire baskets) to prevent fish from entering the old ladder entrance on the right bank
8 of the river (this prevented fish from passing into the spillway plunge pool). Then in 1984
9 the spillway was modified to improve hydraulic depth and to direct fish away from the
10 bedrock at the end of the spillway into the plunge pool. A new trap was constructed in
11 1999 to capture fish migrating upstream on the left bank of the river. The existing fish
12 passage was improved by removing rusted and broken gabions, buttressing the fish ladder
13 with boulders, removing mid channel willows and adjusting the gradient of the streambed
14 above the old ladder in 2003. In a letter dated April 22, 2013, NOAA Fisheries "*strongly*
15 *encourages California American Water to resolve the fish passage and other potential*
16 *take issues at Los Padres Dam by completing a thorough feasibility study on the merits of*
17 *either: 1) entirely removing the dam and restoring the reservoir area to its original*
18 *environs; or 2) improving the dam with appropriate permanent fish passage modifications*
19 *that allow for unimpeded, safe and effective, upstream and downstream migration of all*
20 *life stages of S-CCC steelhead.*" This letter is included as **Attachment 8** to my
21 testimony. In addition, to reinforce the importance of performing the requested detailed
22 feasibility study, NOAA Fisheries previously released a document in September 2012
23 entitled "South-Central California Steelhead Recovery Plan", labeled as Public Review
24 Draft. This document lays out a recovery plan for the conservation of the steelhead.
25 More specifically, the Los Padres Dam is listed as a threat to the species, specifically
26 stating "*The Los Padres Dam has also constrained the natural movement of steelhead,*
27 *with upstream migrating adults and downstream emigrating juveniles.*"

1 The detailed feasibility study for the future of Los Padres Dam is expected to be rather
2 comprehensive, it will address the sensitive issue of existing “water rights”, and it will
3 result in a detailed cost estimate for either option. The feasibility study would examine
4 the hydrologic impact on the Carmel River with the dam in place (storing water), or if the
5 dam is non-existent. There is keen interest in examining how the Carmel River will
6 respond to reduced (or no) pumping from wells along the river during the low flow
7 season. It is also expected a strategy would need to be developed for working with the
8 Monterey Peninsula Water Management District on how to best manage the Carmel River
9 under either option, because of its many on-going environmental programs. It is
10 anticipated that if the dam were to remain “in place,” then the feasibility study would need
11 to answer critical questions such as: 1) improving upstream fish passage; 2) addressing the
12 present sediment in the reservoir (i.e., what to do with what is presently there, and/or a
13 continuing management/maintenance program); 3) installing appropriate screening on the
14 intake/outlet structures; 4) insuring adequate fish passage through any accumulated
15 sediment in the reservoir; 5) addressing water quality and temperature issues in the
16 reservoir; and 6) replenishment of gravel in key downstream areas to facilitate fish
17 spawning areas. This list is not intended to be all inclusive, but an example of the many
18 issues to be addressed. By performing a detailed feasibility study (similar to a
19 Proponents’ Environmental Assessment), it is hoped we would reach an option that is
20 mutually agreeable to all parties from a technical, practical, and economic perspective.
21 The current plan is to develop the scope of work and award the feasibility study to a
22 qualified environmental consultant by mid-2015, and complete the work on a final draft
23 document by the end of 2017.

24
25 California American Water states at this time that this proposed feasibility study is still in
26 a preliminary stage of development. It is possible the request for this investment project
27 could be modified in this GRC application as discussions continue with NOAA Fisheries
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1 and other parties. In the end, it should be recognized that California American Water only
2 wants to propose a project that best addresses the concerns of NOAA Fisheries.
3 Additional information on the current project's scope is contained within the capital
4 project workpapers.
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6 **Project Code I15-400095 Fire Flow Improvement Program**

7 Table 4D shows the requested budget for this investment project. This proposed
8 investment program will allow for the construction of the highest priority pipeline and
9 booster pumping improvements to increase fire flow capabilities within the Monterey
10 District. Priority projects will be determined in conjunction with the Fire Flow Task Force
11 which consists of California American Water personnel and local fire agency staff. The
12 2008 Monterey GRC Decision created a task-force comprised of representatives from the
13 local fire department. The purpose of the task force was to work with Fire Chiefs to
14 determine the highest priority improvements needed within the systems to address fire
15 flow deficiencies. California American Water performed a comprehensive fire flow
16 improvement study to identify and prioritize deficiencies within the System. The study
17 was performed using a GIS based hydraulic model that simulated both the current and
18 improved fire flow capabilities, and presented a prioritized list of specific projects to
19 address deficiencies. Over 18 miles of pipeline improvement projects along with multiple
20 pumping and storage projects were identified. Working through the Fire Flow Task
21 Force, the identified projects will be used to facilitate discussions with the local Fire
22 Chief's about their highest areas of concern. The requested budget will allow for
23 construction of approximately 3,000 lineal feet of pipeline improvements.

24 California American Water recommends that the Commission approve this IP for the
25 requested dollar amount and the present timeframe. Additional information, justification,
26 and documentation can be found in the Capital Investment Project Workpapers for this
27 specific project.
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