

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

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates.

A.12-04-019

(Filed April 23, 2012)

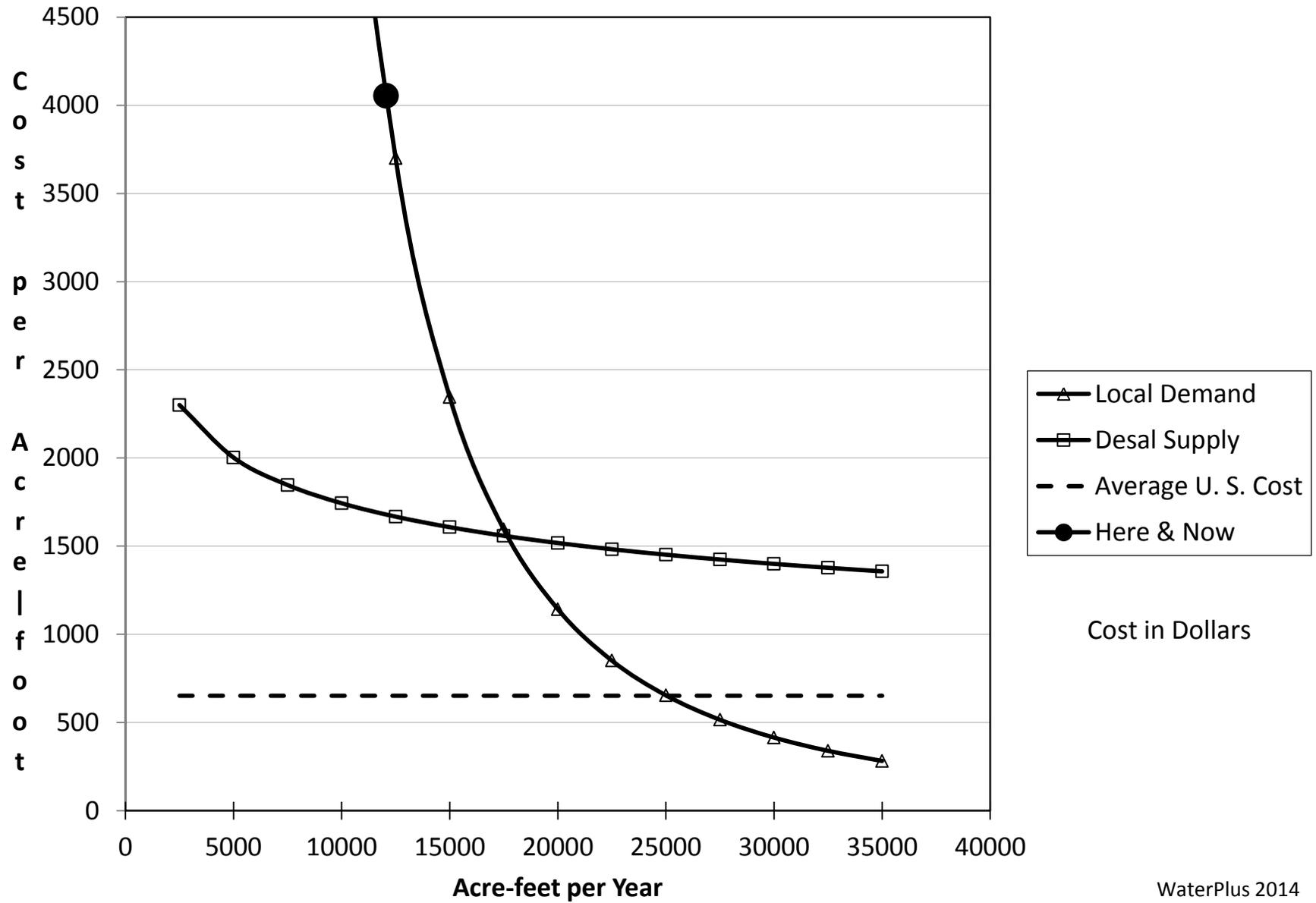
**OPENING BRIEF**

**BY WATER PLUS**

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Dated January 21, 2014

# WATER SUPPLY & DEMAND



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## **I. Introduction**

Pursuant to Rule 13.11 of the Rules of Practice and Procedure, Water Plus files this brief in the proceeding for A.12-04-019. The person preparing this brief is not an attorney. Although Water Plus can claim intervenor compensation, it has not been able to secure a local attorney because none contacted was willing to wait until the end of the proceeding to receive compensation. That being the case, this brief will consider only modifications of the proposed settlement agreement that will help ensure that the water-supply project to which it applies is consistent with all the facts and is in the public interest. Water Plus was not a signatory to the agreement.

## **II. The Bifurcation Decision Should Allow for an Additional Option**

As proposed in the settlement agreement, the Commission has agreed to decide whether the new water source should consist of only desalination or a combination of desalination and groundwater replenishment ("GWR"), the so-called GWR Decision. It has agreed to make this decision on a certain date, July 2015, to give California-American Water ("Cal Am") sufficient time to go forward with either option in an attempt to meet the state Water Resources Control Board's cease-and-desist order ("CDO") deadline as nearly as possible. Water Plus

recommends that on this date the Commission also consider the inclusion of a third option: to deny the Cal Am project as not in the public interest in favor of a desalination-only project proposed by a local Monterey County company and to authorize Cal Am to enter into a water-purchase agreement (“WPA”) with the project owner (“the third option”). The reason for this recommendation is that the third-option project may show at that time that it is able to meet the CDO deadline while the Cal Am project is already known not to be able to do so. A project that meets the deadline is in the public interest. It will save ratepayers either from paying a serious fine imposed by the state or from suffering a serious reduction in the amount of water available to them. If such a project is also available for sale to a local public agency, it could also save ratepayers a substantial amount of money, as will be shown later in this brief.

### **III. The Desalination Plant Size Should Provide Sufficient Water to Meet Predictable Demand**

The proposed settlement agreement failed to consider cost to ratepayers in its recommendation of the size of the of the project’s desalination plant. To avoid confusion, this discussion will consider only the desalination plant without supplementation by GWR, the combination, as acknowledged in the settlement

agreement, being a more costly option. The consideration of cost affects the determination of not only plant size but also the extent to which desalination should contribute to the total Monterey Peninsula water supply.

Nineteen parties participate in the Commission proceeding on Cal Am's proposed water- supply project, including the desalination plant. Of these, six have joined Cal Am in its proposal to the Commission of a specific size for the plant.

This proposal is based on several components of water demand to determine total demand and several components of water supply to determine total available legal supply, the total demand being 15,296 acre-feet and the total available legal supply, 5,544. The plant size proposed in the seven-party agreement is the difference between these two numbers: 9,752 acre-feet.

Although a number of parties in the proceeding believe this amount is too high because it includes growth-permitting water for empty lots and tourism rebound, WaterPlus, while not one of the seven agreeing parties, believes it is at least the amount ratepayers need because local household use is only about 60 percent of national household use, largely because of the unusually high cost of water on the Monterey Peninsula.

Cost affects or is affected by supply and demand, and so it is perplexing that cost has apparently not entered into Cal Am's determination of plant size. Cost certainly affects demand: the higher the unit cost, the lower the demand, as we

have just seen. Cost is also affected by supply: because of economies of scale, the greater the supply, the lower the unit cost. Economists use these two relationships to construct supply and demand curves to determine production size at the point of their intersection. Appendix A shows such a graph constructed particularly for water on the Monterey Peninsula.

Based on actual desalination-plant data from across the United States, the supply curve shown in Appendix A was prepared in 2010 by the Office of Ratepayer Advocates. According to Yale's Shella M. Olmstead and Harvard's Robert N. Stavins in "Managing Water Demand" (Pioneer Institute 2007 white paper), a ten percent drop in cost tends to result in a four percent increase in demand for water where cost is high, as it is here. That information, together with the local demand in 2012 of 12,052 acre-feet of water at a cost of \$4,052 per acre-foot, enabled the construction of the local demand curve shown in Appendix A.

The intersection of the supply and demand curves being at about \$1,600 and 15,500 acre-feet, this graph shows that our total water supply should be about 15,500 acre-feet, 402 acre-feet more than the amount proposed by Cal Am, and that it should cost about \$1,600 per acre-foot if the sole source of water on the Monterey Peninsula were desalination. Contrary to common belief, this graph also shows that the cost of desalinated water per acre-foot, though greater than the average cost of water from all sources in the United States (shown by the dashed

line), is less by far than the current cost of water on the Monterey Peninsula (represented by the large dot on the graph).

This is an enormous cost difference. The implications are plain: All Monterey Peninsula water should come from desalination, unless Cal Am can substantially reduce its costs from other sources, and the amount of this water should be no less than 15,500 acre-feet. Any other option would not be in the public interest because it would result in an increased unit cost of water for ratepayers.

#### **IV. The Third Option is Superior to the Others because It Can Save Ratepayers Hundreds of Millions of Dollars**

Recently, one of the administrative law judges assigned to this proceeding requested that Cal Am show the major components of its approximately \$400 million desalination project. In supplying this information, Cal Am presented a number of scenarios. None explicitly showed the total overall cost to ratepayers including profit, interest, and taxes over the amortization years of the project. Of particular interest here is the use of the data supplied by Cal Am to compare the total overall costs to ratepayers associated with two of these scenarios in relation to the total costs associated with both the worst-case scenario and the best-case scenario, along with the identification of the conditions that need to exist for each

of these scenarios actually to occur. The result of this comparison is certainly worthy of the Commission's consideration.

Cal Am indicated that the total project cost of \$412.9 million includes both equity and debt in a 53-to-47 ratio. The Commission authorizes Cal Am to charge ratepayers about 8.5 percent of the rate base to cover profit on the equity portion and interest on the debt portion. In the worst case scenario, the rate base is equal to the entire \$412.9 million. Amortizing that for 30 years at 8.5 percent yields a total project cost over that period of \$1.143 billion, of which \$730 million consists of profit and interest charged to ratepayers.

Ratepayers also pay Cal Am's taxes, which are proportional to the rate base.

Since the current rate base is about \$126 million, the project rate base in the worst case scenario is 3.28 times the current rate base. Taxes now charged to ratepayers are about \$5.5 million a year. So the taxes charged to ratepayers over the 30 amortization years of the project would be 30 times 3.28 times \$5.5 million, or about \$541 million. Adding that to the \$730 million 30-year profit and interest charged to ratepayers shows that in the worst case scenario Cal Am's desalination project could cost ratepayers \$1.271 billion.

Cal Am has proposed two fixes to lower this cost. The Commission authorizes Cal Am to charge ratepayers 6.63 percent interest on debt. Cal Am's

first proposal is to lower this to 4.3 percent with the money coming from the company's own loan program. The result is to charge ratepayers about 7.375 percent rather than 8.5 percent rate of return on the rate base. The second fix is to charge ratepayers a surcharge of \$71.5 million that excludes both interest and profit and lowers the rate base to \$341.4 million and the tax multiplier to 2.71.

Taking these two fixes into account results in a profit-plus-interest cost to ratepayers of \$508 million over 30 years of loan amortization. Including 30-year taxes of \$471 million and the surcharge of \$71.5 million, that amounts to a total ratepayer cost of \$1.027 billion and a savings over the worst case scenario of \$244 million. The Commission must approve these two fixes proposed by Cal Am, a likely occurrence.

Cal Am has proposed another fix that requires approval by the state water resources control board. This fix is to secure 2.5 percent funding over 20 years via a revolving fund administered by the board. Since access to this fund is limited to public agencies or nonprofit organizations and since Cal Am is neither, this fix is an unlikely occurrence, not to be considered further here.

The mayors' regional water authority has proposed an additional fix for which Cal Am has provided data. Called securitization, this would enable the local water management district to obtain public funding at about 3.625 percent for

\$124.5 million of the project's cost and so lower the rate base to \$203.6 million after also subtracting the \$71.5 million surcharge. This fix reduces the tax multiplier to 1.62 while keeping the same 7.375 percent rate of return for the rate base proposed by Cal Am.

Taking these changes into account yields a total cost to ratepayers of \$846 million over the 30-year amortization period, a savings to ratepayers of \$425 million over the worst-case scenario. For this fix to occur, the state Legislature must pass enabling legislation and credit agencies must give their approval, both infrequent occurrences.

The best-case scenario is for a public agency to develop the water-supply project with debt financing at 2.5 percent over 20 years via the state revolving fund. Cal Am data show that the project cost in this scenario would be \$232 million. Subtracting a surcharge of \$71.5 million leaves only \$160.5 million to be financed at a cost of \$204.1 million over 20 years. Adding back the \$71.5 million yields a total 20-year cost to ratepayers of \$276 million, for a savings of \$995 million over the worst-case scenario.

This is 4.1 times the savings from Cal Am's scenario and 2.3 times the savings from the mayors' scenario.

These considerations lead Water Plus to recommend that the Commission choose the third option if the local company proposing it assures that it will be available for sale to a local public agency.

**V. A Public Agency May Purchase Cal Am in the Near Future**

Not taken into account in Cal Am's proposal or in the proposed settlement agreement, a Monterey Peninsula group of ratepayers have obtained sufficient signatures to put an initiative on the June 2014 ballot that would require the Monterey Peninsula Water Management District to take steps toward its purchase of Cal Am in the near future. The success of that undertaking would assure a public owner of the Monterey Peninsula's new water supply. That is all the more reason for the Commission to consider the third option, leading to public ownership of the new water supply, on the date when the Commission is scheduled to make its bifurcation decision.

**VI. California is in the Midst of a Drought Aggravated by Global Warming**

Also not taken into account in Cal Am's proposal or in the proposed settlement agreement is the drought in California that has persisted for almost three

years now and is likely to continue and grow even worse as a consequence of global warming. Drought affects aquifer storage and recovery (“ASR”) and GWR, both negatively. The Carmel River has had almost no water available for storage in the ASR program, and Salinas Valley farmers will need the winter sewer water that was to be used for GWR. The environmental impact report for either version of Cal Am’s project will have to consider the effect of local climate change on the Monterey Peninsula’s water supply. Water Plus urges the Commission to give serious consideration to a requirement that desalination be sufficient to meet the entire water demand on the Monterey Peninsula.

## **VII. Conclusion**

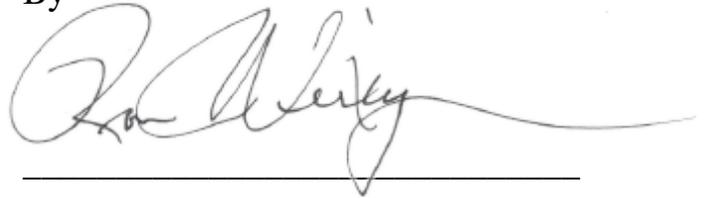
For these reasons, Water Plus recommends that the Commission on the bifurcation-decision date also consider (a) denying Cal Am’s project as not being in the public interest in favor of a desalination-only project proposed by a local Monterey Peninsula company and (b) authorizing Cal Am to enter into a WPA with the owner of this project if it can meet the CDO deadline, can substantially help provide at least 15,500 acre-feet of water to meet total local demand, and be available for sale to a local public agency.

DATED: January 21, 2014

Respectfully submitted,

WATER PLUS

By

A handwritten signature in cursive script, appearing to read "Ron Weitzman", is written over a solid horizontal line.

RON WEITZMAN

PRESIDENT