

ITP Straw Proposal #5 v.2 (10/15/13)

Inclusion of Urban Water Supplier's "Avoided Cost of Water"

Potential amendments to §10631 of the Urban Water Management Planning Act and the accompanying DWR UWMP Guidebook for the calculation and display of the avoided cost of water deliveries from efficiency/conservation programs.

The Independent Technical Panel on Demand Management Measures (ITP) recommends that the Urban Water Management Planning Act be revised to require urban water suppliers serving a population of over 50,000 to calculate and display the supplier's "avoided cost of water" within their UWMP.

The avoided cost of water equates to the value of water savings, i.e., the monetary benefits against which the costs of various water conservation and efficiency measures can be weighed. Thus, understanding the avoided cost of water is an essential pre-requisite for assessing the cost-effectiveness of conservation and efficiency programs. This concept is widely adopted and applied in the energy sector as well. The Urban Water Management Planning Act already requires water suppliers to project the development of new water supplies, which presumes that they compare the cost effectiveness of supply options (one of which is conservation). Without knowing the "avoided cost of water" from efficiency programs, it is impossible to know how conservation falls within the cost range of supply options. Therefore, asking for this information to be reported via the UWMPs is simply a way for water agencies to show the rational basis of their supply choices and DMMs.

Avoided cost information is first and foremost useful to the water agencies themselves. To support this effort, NGOs and government agencies have developed a host of tools for use by water suppliers. For example, the CUWCC developed an avoided cost calculator for California water suppliers many years ago with support of the US EPA. The CUWCC model takes into account future capital costs as well as current and future operating costs that may be avoided as a result of conservation and efficiency measures. This tool complements the use of the CUWCC's Cost Effectiveness Calculator, which allows agencies to determine the benefits of implementing individual water efficiency measures. Other NGOs, such as the Pacific Institute and the Alliance for Water Efficiency, have developed similar tools, and consulting firms can provide such calculations as well. Furthermore, the California Public Utilities Commission will soon have work under contract to develop a robust avoided cost tool for water, the goal of which is to provide a user friendly interface that produces reliably accurate results.

The Act (at 10631(b) and (h)) already requires water suppliers to enumerate all water supplies, projects, and programs needed to meet total projected water use. The cost and timing of such investments can be entered into an avoided cost model, and when combined with estimated operating costs and an appropriate discount rate, will provide the present value of water savings that may be achieved with conservation measures. The calculation and reporting of avoided cost

will not only benefit each water supplier subject to the Act, but will also be useful in identifying regional and statewide trends.

However, recognizing that calculating avoided costs may take at least some staff time and resources not currently committed to the UWMP process, the requirement to report can be limited to the larger water agencies in the state, so as not to burden smaller agencies with limited staff. This is not to say that smaller agencies would not benefit from understanding their avoided cost of water, but only that it is not our intent to burden small agencies that are not already making this calculation. Therefore, we recommend that the requirement be limited to those agencies serving a population of greater than 50,000 people. This would represent water deliveries to approximately 26 million Californians, or about 74% of the population served by a public water supplier.

DWR's 2015 Guidebook should enable smaller water retailers to develop and voluntarily report simplified estimates of their avoided cost of water based on a set of system characteristics and regional parameters, to be developed with assistance from the CUWCC and CPUC as part of the 2015 guidance update.

To ensure consistency in reporting, the Department of Water Resources (DWR) should require larger suppliers to use the CUWCC avoided cost model or such other methodology as may be provided in the 2015 UWMP Guidebook. The Guidebook, when updated, should provide an overview and assessment of the methods and tools available to calculate avoided costs, and could provide general parameters for quality control and ease of use.

Suggested statutory language: Add the following new subsection to Section 10631 of the Water Code:

“() Urban water suppliers serving populations greater than 50,000 shall include an estimate of the present value of the avoided cost of water, derived from the application of methodology approved by the Department.

[Note: 156 suppliers serve populations over 50k and serve roughly 26.5 million people]