

## **V. WATER CONSERVATION ELEMENT**

### **A. Introduction**

*The Water Conservation Element of the Water Forum Agreement is essential to meeting both of the co-equal objectives of the Water Forum. It helps meet the region's water supply needs, and minimizes the need for increased groundwater pumping and increased use of surface water, including diversions from the American River. Each water supplier in the region is committed to implementing a comprehensive water conservation plan.*

Continued commitment to water conservation will benefit water purveyors, customers, and the environment because it:

- Reflects growing public support for the conservation of limited natural resources and adequate water supplies.
- Allows water districts to optimize the use of existing facilities.
- Delays or reduces the capital investments required for capacity expansion of water and wastewater treatment facilities even though the service area may grow.
- Is essential for the state and federal agency approvals which will be required for specific projects.

## **MUNICIPAL AND INDUSTRIAL WATER CONSERVATION**

### **B. Intent**

Water Forum Water signatories have generally agreed upon the following broad objectives for water conservation in the region:

- All parties seek to maximize water conservation in a way that is accountable, easy to monitor and track and are effective.
- A water conservation program has merit and all Water Forum purveyor signatories agree to implement a water conservation program that is consistent with the California Urban Water Conservation Council Memorandum of Understanding (Council MOU).
- Recognizing that many of our purveyors are not yet fully metered, there may need to be flexibility in how purveyors implement certain water conservation actions.
- While we are seeking a broad "universal" solution that applies to all purveyors, we recognize that each purveyor has unique water sources, decision-makers and structures, and constraints/opportunities.

### **C. Key Elements**

1. Water Forum signatories agree to update the Water Conservation Element of the Water Forum Agreement by replacing current water conservation plans with the "California Urban Water Conservation Council Memorandum of Understanding Regarding Urban Water Conservation in California," (Council MOU) including its Best Management Practices (BMPs), schedules, targets, procedures and requirements. Variations from the Council practices are noted in the following text.
2. Water Forum signatories agree that in replacing their 2000 Water Conservation Plans with Council MOU, they are agreeing to changes and modifications to

Council processes and BMPs as they evolve over time, including the 2008 revisions and subsequent revisions. Water Forum signatories further agree that signatory purveyors without land use authority can not be required to implement programs or processes that they do not have legal authority to implement (i.e. landscape requirements).

3. Water Forum signatories are encouraged to become members of the Council in order to be actively engaged in discussions regarding revisions to the MOU and the BMPs, and to take advantage of the Council's resources and expertise.
4. Water Forum signatories recognize that the Council has existing procedures in place to enable members to request exemptions from BMPs. Water Forum signatories agree that this process does not result in a clear decision and does not ensure full compliance of BMPs. To address this shortcoming, the Water Forum will use its own procedure for considering BMP modifications; known as deferrals.
5. Consistent with the assurances and caveats listed in Section Four of the Water Forum Agreement, it is recognized that over time there will be changed circumstances that are not currently foreseen. Therefore, signatories agree when the need arises to meet and confer on how best to respond.

**D. Pre-Determined Deferrals on Meter-Based BMPs**  
*(The following apply regardless of which Council track is implemented)*

1. For BMP 4 (metering), at a minimum we accept the pace of residential meter retro-fit by each of those Water Forum purveyors not yet fully metered, as stated in Appendix J of the 2000 Water Forum Agreement, or the pace required by State law, whichever controls. This deferral recognizes that several Water Forum water purveyors are not yet metered and are investing in water meter and retrofit programs at a pace that is feasible but which may not be the rate stated in the Council MOU.
2. For BMP 1 (Residential Audits), targets are based on the purveyor's number of metered residential accounts; so, as an agency becomes more fully metered, its "population" of potential audit customers increases. It is understood that this is a pre-determined "deferral." Audit programs must still be in place, but targets are proportional to metered accounts.

**E. Additional Deferral Requests**

1. If a water purveyor wants to request any other deferral from a standard BMP target, or a change in schedule or practice, the following procedure will be followed:
  - a. Water Forum signatories will follow the Council analysis and modeling tool. The analysis will be submitted to the Water Forum Water Conservation Negotiation Team (WCNT) who will have a technical review completed by an independent third party. The WCNT is composed of one representative from each Water Forum caucus (business, environmental, water, and public) and from each size and type of water purveyor in the region (publicly owned, investor owned, etc.)
  - b. Water Forum staff would develop a list of water conservation professionals based on qualifications and criteria agreed upon by the WCNT. This list of

qualified candidates will be vetted through the WCNT. The list needs to be long enough to ensure that purveyors have adequate choices and can maintain reasonable costs. The list could also include Council staff reviewers.

- c. The water conservation professional and water purveyor staff will conduct a review of the analysis for adequacy and compliance with the Council BMP. The review/technical validation will include checking data adequacy and accuracy, and will explore whether or not changes or modifications to the program design, would affect the outcome. The water conservation professional may suggest new partners or funds that might be available to assist the purveyor in implementing the BMP. This analysis with suggested changes will then be forwarded to the Water Conservation Negotiation Team for its review and discussion.
- d. After completion of the review/technical validation, if the BMP is found to have a benefit-cost ratio of 1 or greater (there is a greater benefit to the program than the cost to implement it), no deferral will be allowed.
- e. If a BMP is found to have a benefit-cost ratio of less than 1 (this is expected to be uncommon), then the purveyor will have the choice of continuing with the BMP or deferring that BMP and substituting an alternative program as described below. However, prior to selecting an alternative program, the purveyor will offer to meet with Water Forum stakeholders to discuss deferral/substitution options. The intent of the meeting will be to have an open discussion about the advantages and disadvantages of the deferral/substitution options, provide interested stakeholders with relevant information, and provide stakeholders an opportunity to weigh in on the deferral/substitution options. Deferral options under discussion at this meeting will include, among other things, methods for redesigning the potentially-deferred BMP. This open discussion is not intended to prolong the BMP planning process or second-guess the independent technical review.
- f. Water Forum signatories agree that for any program or BMP that is deferred, the water purveyor will apply the program costs that were reported in the BMP deferral analysis toward the implementation of another BMP with the intent of achieving as much if not more water savings through expanding one or more of the remaining BMPs. Water Forum signatories agree to take into account existing acceleration of a BMP on a case-by-case basis.
- g. Water Forum signatories agree that any benefit-cost analysis performed will include an environmental cost of water of \$75 per acre-foot, adjusted annually for inflation using the same method outlined in the Water Forum Agreement to adjust annual contributions to the Habitat Management Element. This \$75 amount was negotiated by members of the WCNT and is based on historical purchases of water from the region for the CALFED Environmental Water Account.
- h. Water Forum signatories agree that deferrals will be granted for a period of two years, in accordance with the reporting cycle of the Council. After this time, purveyors would either resume the BMP or seek another deferral using the same process outlined above.

**F. Assurances and Reporting**

1. Water Forum signatories recognize that some purveyors may need to seek support for certain conservation program by their boards and decision-makers. If requested, Water Forum signatories agree to publicly support conservation programs and any rate adjustments that are needed to implement the water conservation plans.

2. Reporting

a. Water purveyors will submit biennial reports on the implementation of water conservation activities pursuant to the reporting requirements of the Council. These reports will be shared with the Water Forum Successor Effort.

b. The biennial reports will include a comparison of total and per capita water use with original projections as published in the 2000 Water Forum Agreement Appendix J. In addition, the Water Forum will revisit the method used to estimate GPCD in the 2000 Agreement so that it is consistent with approaches used by other agencies and organizations, including the Council, the Legislature, and the Department of Water Resources.

c. If there were any significant differences from what water conservation activities or results were planned, an explanation of the differences will be included. If water conservation results were significantly less than anticipated, an indication of how the results will be achieved in the future will be described. Water purveyors have the option of reporting this information in the Council database comment field

3. Assurances

The Water Forum Successor Effort will do the following in order to facilitate compliance with water conservation implementation:

a. Publicize the biennial BMP implementation CUWCC reports that are submitted by Water Forum signatories. This can include distribution of the reports to all Water Forum signatories, boards, elected officials and the media.

b. Water Forum signatory organizations may submit letters to the State Water Resources Control Board, Department of Water Resources or other funding and/or regulatory agencies stating their support or opposition to requests or actions of other signatory organizations based upon progress of water conservation program implementation.

c. Water Forum signatory water purveyors will notify their customers as to agency progress toward water conservation program implementation through already established means of communication such as newsletters, customer bill inserts or water purveyor web sites. This will be consistent with the biennial reporting timeframe of the water conservation report.

## G. Other Agreements

1. **Florin County Water District and Del Paso Manor County Water District.** It is recognized that residential water meter retrofit along with quantity based pricing are important tools for improving the efficiency of water use. This helps extend the supply while also reducing the need for increased groundwater pumping or diversions from the American River.

It is also recognized that these two relatively smaller water purveyors currently rely totally on groundwater and will not realize immediate water supply benefits from participating in the *Water Forum Agreement*. Therefore until such time as these two purveyors need discretionary approvals for new or expanded surface water supplies, an active voluntary meter retrofit with incentives is acceptable. Nothing in the *Water Forum Agreement* prevents purveyors from deciding to undertake a more rapid meter retrofit program.

At such time as any of these purveyors needs discretionary approvals for new or expanded surface water supplies they agree to annually retrofit at least 3.3% - 5% of the total number of un-metered residential connections and read and bill as set forth below.

If in the future any of these purveyors receives benefits from another agency's conjunctive use program, it agrees to discuss its meter retrofit program with the Water Forum Successor Effort.

2. Water Forum signatories would not implement local meter retrofit on resale, or any other requirements that would impose escrow or disclosure responsibilities on realtors. All purveyors would retain the ability to implement incentives for a voluntary meter retrofit at time of resale that would not impose escrow or disclosure requirements.

3.. If requested, all signatories to the *Water Forum Agreement* will actively support the California Public Utilities Commission (CPUC) allowing investor-owned utilities to recover all costs of meter retrofit through rates.

4. A purveyor's agreed upon Water Forum water conservation plan shall be implemented for its entire service area including future changed boundaries.

## AGRICULTURAL WATER CONSERVATION

In 1990, agriculture in Sacramento County contributed to nearly 48% of the water demand for the area. It is projected that the future water demand for agriculture will drop to approximately 29% by 2030. This is due to a number of reasons including the conversion of agricultural land to urban uses as anticipated by the adopted General Plans. Another reason for water use reduction is that agriculture in Sacramento County is projected to become more water efficient. By the year 2030 irrigation efficiencies are expected to increase by 5%.

The amount of water used by agriculture is determined by the crops grown, the type of irrigation system, and the incentives or regulations in place to increase irrigation efficiencies.

In the northwest section of Sacramento County the principal crop is rice. Water is supplied by the Natomas Central Mutual Water Company (NCMWC) which is a Central Valley Project (CVP) contractor. NCMWC has been conserving water since 1986 through the installation of recirculation systems which reduce water diversions while growing the same amount of crops. These systems have reduced water use in rice fields by 26%. In the future, NCMWC will continue to conserve surface water by conjunctive use. By pursuing this additional method, it is expected that another 5% could be saved. Other efforts, such as lined canals in sandy soil, tiered pricing, and other controls are expected to gain additional efficiencies.

In the southern section of Sacramento County, water is supplied principally through the pumping of groundwater. One incentive to reduce agricultural water use in this area has been the cost of electricity to pump groundwater. Since the early 1950's the south County agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) have been practicing water conservation by installing recirculating systems so water would not be lost at the end of the fields and drip irrigation systems for certain row crops. It is estimated that these methods have reduced water use by up to 50% compared to field irrigation. By implementing additional conservation measures it is expected that another 5% could be saved by 2030.

Much of the surface water currently used by agriculture in the Sacramento region is from the Central Valley Project (CVP). In addition, as provided for in the PSA for South Sacramento County Agriculture, the agricultural irrigation districts (Galt, Clay, Omochumne-Hartnell) in the southern section of Sacramento County plan to divert and use up to 35,000 acre-feet from Folsom-South Canal in years when the projected March to November unimpaired inflow to Folsom Reservoir is greater than 1,600,000 acre-feet. This will augment its groundwater supplies. This surface water most likely will come from the CVP. Surface water from the CVP for agricultural use is subject to the conservation requirements of the CVP Improvement Act of 1992 including criteria for BMPs for Agricultural Contractors.

Support for this diversion is linked to successful negotiation of an agricultural water conservation program. Specifics on the Water Forum's agricultural water conservation program will be negotiated by the Water Forum Successor Effort.