

# Memorandum

Date: July 11, 2011

To: Joe Grindstaff  
Executive Officer  
Delta Stewardship Council  
980 Ninth Street, Suite 1500  
Sacramento, California 95814

From: **Department of Water Resources**

Subject: Information Request from Chair Isenberg on Reducing Reliance on Delta Water Supplies related to Urban and Agricultural Management Plans

Attached is information requested by Chairperson Isenberg at the June 29<sup>th</sup> Delta Stewardship Council meeting. The information pertains to reducing reliance on delta water supplies as it relates to DWR's role in Urban and Agricultural Water Management Plan reviewing process. Specifically, Chair Isenberg requested information on the work that DWR staff perform, and what authorities and responsibilities DWR has and does not have in reviewing and accepting water management plans provided to DWR by urban and agricultural water agencies.

In addition to the information requested above, I have provided some suggestions on additional actions that the DSC may be interested in providing support for DWR to implement, but that would require additional staff and funding to accomplish.

If you have any questions or need additional information related to this document, you may contact Manucher Alemi, Chief, Office of Water Use Efficiency at (916) 651-9662.

/s/

Dale K. Hoffman-Floerke  
Chief Deputy Director  
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Attachment

# Draft Water Use Efficiency Actions to Reduce Reliance on Water Supplies from the Delta

## Agricultural Water Use Efficiency

Background – Following the enactment of new legislation large agricultural water suppliers (greater than 10,000 acres) are required to implement efficient water management practices and prepare Agricultural Water Management Plans (AWMPs) and submit to DWR. DWR estimates that there are 127 agricultural water suppliers in the state whose irrigated acreage is greater than 10,000 acres for a total of 6.6 million acres. The number of water suppliers relying on the Delta is not known. In these plans water suppliers are required to provide an estimate of water use efficiency improvements achieved in the past 5 years and water use efficiency to be achieved in 5 and 10 years in the future. Water suppliers are required to submit water accounting information including quantity of water supplies, water uses, and an overall water budget. Beginning in July 2013, agricultural water suppliers are not eligible for state water grants and loans unless they comply with these requirements. Water suppliers are also required to submit aggregated farm-gate delivery data to DWR on an annual basis.

DWR was required by SBX7-7 to prepare a proposed methodology for quantifying the efficiency of agricultural water use. The Methodology for Quantifying the Efficiency of Agricultural Water Use Report, May 2012, hereafter referred to as Proposed Methodology was submitted to the Legislature in June 2012. The SBX7-7 legislation did not authorize DWR to implement/require water suppliers to implement the Proposed Methodology. Unless the Legislature requires DWR and the agricultural water suppliers to implement the Proposed Methodology, it will not be implemented.

### DWR Authority:

- DWR review of AWMPs - DWR reviews the AWMPs and analyzes the estimates of water use efficiency improvements reported by the water suppliers to evaluate effectiveness of the SBX7-7 requirements in promoting Efficient Water Management Practices (EWMPs) and for preparing a report to the legislature. In reviewing the AWMPs, DWR follows a check list (available to water supplier) of all plan contents as required by CWC section 10826 and checks for inclusion of all contents of the plan. DWR does not evaluate the accuracy of the information. DWR does not have authority to inspect, monitor, or enforce preparation or implementation of the AWMPs. In reviewing the AWMPs, DWR does not approve, disapprove or critique the plans. If a plan content element is missing or appears erroneous, DWR communicates with the water supplier to address the element. In some cases, where changes are significant, water supplier readopts the plan and resubmits to DWR to meet the CWC requirements. If all the plan contents are included, the water supplier is determined to be in compliance.
- Legislative Report – On or before December 31, 2013, 2016, and 2012 DWR is required in consultation with the Water Board to prepare a report to the

legislature on the status of the AWMPs adopted, outstanding elements of the plans, EWMPs implemented, estimated water use efficiency improvements, effectiveness of the SBX7-7 requirements in promoting EWMPs and recommendations on proposed changes to the Water Code. In preparing the report to the legislature DWR will estimate the water use efficiency improvements, but DWR's ability in estimating the efficiency improvements is limited to the information provided to it in the AWMPs by the water suppliers. DWR in its report to the legislature may recommend to the legislature to require agricultural water suppliers implementation of DWR Proposed Methodology and reporting the results in the AWMPs. DWR Proposed Methodology requires collection and reporting of certain water use and irrigation system performance data that allows for more accurate quantification of water use efficiency improvements. Additionally, implementation of the Proposed Methodology for quantifying the efficiency of water use by all water suppliers provides for a consistent quantification of the water use efficiency. However, implementation of the Proposed Methodology will cost the agricultural water suppliers. DWR has recommended that if the Legislature authorized the implementation of the Proposed Methodology, it should also identify the source of funding for the work to be done.

- Farm-gate delivery data reports - Agricultural water suppliers are required by SBX7-7 to measure water delivery to their customers using applicable options and accuracy standards, DWR has adopted by regulation, and report aggregated farm-gate deliveries to DWR (the regulation was approved by California Water Commission on July 6, 2012, and is expected to be approved by the Office of Administrative Law by July 13). While agricultural water suppliers relying on the Delta are anticipated to comply with the regulation, the aggregated farm-gate delivery data in some cases is not a good estimate of water use efficiency.
- Grants and loans conditions - Beginning in July 2013, DWR can deny water grants and loans to the water suppliers who have not complied with SBX7-7 (have not adopted and implemented the AWMP) or do not have a schedule, financing plan and budget to implement EWMPs.
- Existing grants - DWR has funded over 86 agricultural water use efficiency projects using SB 23 (2001) Proposition 13 (2001-2003) and 50 funds (2002) for a total of \$32 million. the grant funds varies from \$100,000 to \$2.0 million per project. DWR has the remaining \$15 million of Proposition 50 grant funds in FY 2012-13 to encourage agricultural water suppliers' preparation/update of AWMPs and implementation of water use efficiency practices to benefit the Delta.
- DWR is developing a guidebook to assist agricultural water suppliers in preparing AWMPs. The Guidebook provides guidance on how to prepare the plan and includes a check list of the required elements of the plan.
- DWR will update the EWMPs (as required by SB X7-7) in consultation with Water Board, Agricultural Water Management Council and U.S. Bureau of Reclamation. DWR will update the EWMPs after an assessment of the adequacy of EWMPs that will be reported in the AWMPs in December of 2012.

Additional Actions DWR could implement /additional action requiring legislation to reduce reliance on water supply from the Delta:

- DWR to hold workshops to assist water suppliers implement the EWMPs and more consistent estimation of efficiency improvements.
- DSC support - DSC to encourage agricultural water suppliers relying on the Delta to use DWR Proposed Methodology in demonstrating water use efficiency improvements and reducing their reliance on the Delta. Agricultural water suppliers will need funding to implement the Proposed Methodology to demonstrate water use efficiency. Similarly, DWR will need new funding to implement its roles identified in the Proposed Methodology.
- Legislative action - The legislature to require agricultural water suppliers to implement DWR Proposed Methodology in quantifying the efficiency of the agricultural water use and report the results in the AWMPs. If the DWR Proposed Methodology is required, all suppliers will use a consistent method to estimate the water use efficiency improvements in their service area as a result of implementation of EWMPs. Funding authority for implementation of the DWR Proposed Methodology should be established.

### **Urban Water Use Efficiency**

Background: Many suppliers implement demand management measures voluntarily as increased efficiency is often the most cost effective method for improving supply reliability. The State has required water conservation through two approaches. First, through direct code requirements (toilets, showerheads, metering) and land use planning (landscape model ordinance.) and secondly, through grant eligibility requirements. AB 1420 requires that supplier meet the California Urban Water Conservation Council's best management practices coverage requirements to be eligible for grants. SBx7-7 replaces AB 1420 in 2016 and requires that suppliers meet water use targets to be eligible for grants. The Urban Water Management Planning Act does not require implementation of demand management measures, but requires that suppliers describe conservation measures suppliers have implemented or will implement as part of their supply reliability planning. DWR has also provided urban water use efficiency grants.

Urban water suppliers (suppliers delivering more than 3000 acre-feet of water or having more than 3000 connections) are required to prepare Urban Water Management Plans (UWMPs) every five years and submit to DWR for review. SBX7-7 requires urban water suppliers to develop water use targets for 2015 and 2020 to achieve a statewide goal of 20% per capita water use reduction by 2020. DWR was required to convene a Commercial, Industrial, and Institutional (CII) Task Force and develop best management practices for CII water users. The Task Force report is anticipated in September 2012.

#### DWR Authority:

- Grants and Loans- DWR has provided water use efficiency and integrated regional water management grant funding from Proposition 84, 50, 13 and 204. Many of these grants have funded water management projects that have contributed to reduced reliance on Delta water supply. Some examples of grants:
  1. \$1.6 million dollars to Metropolitan Water District of Southern California to provide rebates for high efficiency washing machines. This program is estimated to save more than 12,000 ac-ft.
  2. \$400,000 to West Basin Metropolitan Water District to provide incentives for enhanced commercial, industrial and institutional efficiency programs. The effort saved 1500 ac-ft over 10 years
  3. \$150,000 to Contra Costa Water District for a commercial toilet replacement program. The program replaced more than 1,000 toilets saving over 500 ac-ft for 20 years.
- Urban Water Management Plans - DWR provides guidance and then receives and reviews over 400 urban water management plans submitted every five years. In reviewing the UWMPs, DWR has a check list (available to water supplier) of all plan contents as required by CWC sections 10630-10634 and checks for inclusion of all contents of the plan. DWR does not evaluate the accuracy of the information. DWR does not have authority to inspect, monitor, or enforce preparation or implementation of the UWMPs. In reviewing the plans, DWR does not approve, disapprove or critique the plans. For example, in reviewing the Demand Management Measures (DDMs) of the UWMPs, CWC requires water suppliers to describe the DMMs and if not implemented provide cost effectiveness analysis. If water supplier provides the description or the cost effectiveness, it meets the compliance requirements for this element of the plan. If a plan content element is missing or appears erroneous, DWR communicates with the water supplier to address the element. In some cases, where changes are significant, water supplier readopts the plan and resubmits to DWR to meet the requirements. In reviewing the UWMP, DWR checks the procedures the water supplier has used to calculate the 2015 and 2020 targets for compliance with the DWR Urban Methodology report prepared as required by CWC section 10608.20 (Methodology for Calculating Baseline and Compliance Urban Per Capita Water Use For Consistent Implementation of the Water Conservation Act of 2009, DWR-October 2010). If all plan contents are included, the water supplier is determined to be in compliance.
- 20% by 2020 - DWR developed guidelines, regulations and methodologies for the implementation of the SBx7-7 required 20% reduction in per capita urban water use by the year 2020. DWR staff is currently reviewing water supplier reported water use baselines and targets as part of the 2010 urban water management plan review process. In reviewing the UWMPs DWR checks to ensure that calculation of 2015 and 2020 water use targets are in accordance with the DWR methodologies for implementation of SBX7-7 (Methodologies for

Calculating Baseline and Compliance Urban Per Capita Water Use, for Consistent Implementation of the Water Conservation Act of 2009, October 2010). BY December 2012 DWR will prepare a report to the Legislature on the water suppliers 2015 and 2020 targets. The 2015 and 2020 water use targets reported in the UWMPs will be included in the Legislative Report. In 2016, after reviewing the 2015 UWMPs, DWR will compare the 2015 water use with 2015 targets and report to the legislature on the progress made towards achieving the 2015 and 2020 targets.

- Legislative Report - In June 2012, DWR sent an interim report to the legislature on the status of the UWMPs submitted to DWR and the baselines and targets reported; and in its final report DWR identifies the suppliers who have submitted a plan that has addressed all the requirements and suppliers who have not complied with the law. After reviewing the 2015 UWMPs, DWR is required to report to the legislature in 2016 on the progress towards achieving 20% reduction in per capita water use by 2020 and make recommendations on water use efficiency standards or targets to achieve 20% reduction by 2020.
- BMP Implementation - AB 1420 requires that water suppliers implement water conservation best management practices (BMPs) to be eligible for water management grants and loans. DWR receives and reviews water supplier self certified forms to check if the California Urban Water Conservation Council BMPs are implemented. If the water supplier selects all BMPs as implemented in accordance to CUWCC MOU implementation schedule, the supplier is considered in compliance with AB 1420. A condition of self certification is DWR's possible audit of a water supplier to verify the water supplier's self certification. If a water supplier receives grant from DWR, DWR may inspect the project to verify the water supplier's compliance with the AB1420 requirements during the life of the grant agreement.
- Landscape Water Use Efficiency - DWR provides technical assistance on landscape water use efficiency including developing and guiding the revised landscape model ordinance through the approval process.
- Urban and Agriculture Water Use - As part of the California Water Plan, DWR estimates urban and agricultural water uses including estimates of water use from the Delta.
- Save Our Water Campaign - Started during the 2007-2009 drought the campaign has continued on an annual basis to promote efficient water use in partnering with local agencies and educating the public.

### **Additional actions that DWR could implement to reduce reliance on water supply from the Delta, with additional resources**

- Using the Public Water Supply Service Survey, DWR could develop annual estimates of per capita urban water use and regional estimates of Delta water use.
- Expand the Save Our Water campaign to partner with local water agencies and private industries and raise public awareness of landscape water efficiently techniques.
- Measurement of landscape area - New inexpensive landscape area measurement techniques are emerging using free technology such as Google Earth. DWR can work with water suppliers to refine these techniques that will help them expand using water budgets.
- Conservation rate structure and the volumetric billing of waste water charges can significantly reduce water use. DWR could provide workshops and offer technical assistance to encourage more water suppliers to adopt rate systems.
- System losses average 10% of utility supply in California. The American Water Works Association (AWWA) has developed new water audit software. DWR could offer workshops and technical assistance to encourage more suppliers to perform water loss audits and implement water loss control programs.

### **Additional actions requiring legislation that could reduce reliance on water supply from the Delta**

- Require water suppliers to conduct the AWWA water loss audit and report the results in their 2015 urban water management plans.
- Require dedicated meters for existing large landscape and using water budgets on all large landscapes.
- Require utilities to bill for water use using conservation rate structures, and wastewater services to bill volumetrically.
- Require water suppliers to use standard definitions and classification to report water use.