

# MANAGEMENT MEMO

NUMBER:  
**MM 14-02**

SUBJECT:

## WATER EFFICIENCY AND CONSERVATION

DATE ISSUED:

JANUARY 13, 2014

EXPIRES:  
UNTIL RESCINDED

REFERENCES:

Energy Star Portfolio Manager [www.energystar.gov](http://www.energystar.gov)  
State Agency Facility Water Use Reduction Guidelines and Criteria  
<http://www.water.ca.gov/wateruseefficiency/>  
[EO B-18-12, Green Building Action Plan, Section 12](#)

ISSUING AGENCY:

DEPARTMENT OF GENERAL  
SERVICES

### Purpose

This Management Memo provides direction to all state agencies under the Governor's executive authority on meeting the water use reduction requirements outlined in Executive Order B-18-12. In addition to the water reduction measures outlined in this memo, state agencies should prepare for the possibility that additional conservation measures could be required in 2014 to address the anticipated statewide drought conditions.

### Policy

State agencies shall reduce water use at their facilities 10 percent by 2015, and 20 percent by 2020 as measured against a 2010 (or earlier) baseline. State agencies shall enter complete annual water use data into the [Energy Star Portfolio Manager](#), and provide access to the Department of General Services (DGS) by March 1, 2014, and annually thereafter.

### Who is Affected

All state agencies under the definition of Government Code §11000: (a) As used in this title, "state agency" includes every state office, officer, department, division, bureau, board, and commission. It is requested that entities of state government not under the Governor's direct executive authority also implement similar measures.

### Requirements

The following are requirements for water use for state agencies:

1. State agencies were directed to establish baseline water use for each facility they manage using 2010 water use data (may use earlier data if available<sup>i</sup>) and enter baseline data into the [Energy Star Portfolio Manager](#) database by January 1, 2014. Agencies may exclude process water<sup>ii</sup> from the baseline measurement and water use reduction requirements. Also excluded is water used for fish and wildlife habitat, livestock maintenance, and firefighting. Annual usage will be measured against the baseline to determine if water reduction targets are met.

<sup>i</sup> Agencies that have undertaken significant efforts prior to 2010 to achieve water use efficiency in the construction of new facilities or by the implementation of water use efficiency projects at existing facilities may establish an earlier than 2010 water use baseline.

<sup>ii</sup> For purposes of this Management Memo, "process water" means water used for manufacturing processes, for testing and maintaining manufacturing equipment, and water used in combined heat and power facilities.

**Requirements  
(Cont.)**

2. All new and renovated state buildings and landscapes shall utilize alternative sources of water wherever cost-effective. Sources may include, but are not limited to: recycled water, graywater, rainwater capture, stormwater retention, and other water conservation measures.
  3. New and renegotiated state leases shall include provisions for reporting water use where economically feasible. Agencies managing state-owned buildings are to report water usage. If agencies lease a building or space (state owned) managed by DGS, DGS will report the water use for that building space. If a state agency other than DGS manages the building or space, that agency will report the water use for that building.
  4. Landscape plants shall be selected based on their suitability to local climate and site conditions, and reduced water needs and maintenance requirements. State agencies shall purchase, install and operate WaterSense or equivalent (labeled) industry standard fixtures and equipment (including irrigation equipment) whenever it is available, cost-effective, and meets quality requirements.
  5. By March 1, 2014, state agencies shall enter complete 2013 annual water use data into the Energy Star Portfolio Manager database. Water use data reporting will begin calendar year 2013, and then each subsequent March 1 for the preceding year. Agencies shall provide online access to this data upon completion to the Department of General Services, Office of Sustainability, and notify upon completion to [sustainability@dgs.ca.gov](mailto:sustainability@dgs.ca.gov).
- 

**Developing Water  
Use Baselines**

The 2010 or earlier water use data will serve as the baseline from which the agencies will calculate their 2015 and 2020 water use targets.

Buildings or facilities that meet or exceed 2010 or newer [CALGreen](#) water efficiency standards may be exempted from water use reduction requirements, since they already meet low water use targets. Supporting documents or data must be provided if requested and may include monthly/annual utility water use reports and/or water use calculation tables that document the water use ratings.

Agencies must still report the water use of these facilities in the Energy Star Portfolio Manager database on an annual basis.

---

**Critical Activities for Water Use Reduction**

The following activities are critical for state agencies in reducing their water use:

1. Best Management Practices (BMP) – BMPs are ongoing actions that establish and maintain water use efficiency. State agencies must implement the BMPs in the [Water Use Reduction Guidelines and Criteria](#). State agencies are responsible to review and apply these BMPs to all facilities they occupy.
  2. Inventory - State agencies should complete the Building and Landscape Inventory every five years. The quantitative inventory requires a facility walk-through to assess the types, numbers and condition of all water using fixtures, appliances and irrigation equipment.
  3. Landscape Water Budget Program - Large landscape areas over 20,000 sq. ft. should be managed and water use tracked with a landscape water budget program. Large landscape water use often represents a significant percentage of a facility's water use, and significant water savings can often be achieved through better irrigation scheduling or inexpensive improvements in irrigation hardware. Landscape maintenance staff should attend an [Environmental Protection Agency WaterSense-labeled training program](#) to become proficient in landscape water budgeting and water management.
- 

**Estimating Water Use at Facilities without Water Meters**

It is understood that not all state facilities can report actual water use, because metering or sub-metering is not available. This does not exempt these agencies/facilities from responsibility for active management of water consumption or reporting of water use. Baseline and ongoing water use can be estimated based on the water use ratings of fixtures and appliances at the site, the duration per use, amount of usage, and the number of occupants. DWR's [Water Use Reduction Guidelines and Criteria](#) document provides guidance on how to baseline water usage and report annual usage for facilities without meters. Agencies operating in these facilities should also apply Best Management Practices for Water Use, and document policies for purchasing/replacing water-using fixtures and/or equipment with higher efficiency models. If not cost prohibitive, state agencies should make water meter installations a priority so they can obtain accurate measurements of water use.

---

**Background**

In passing SBX7-7 (Statutes of 2009) the Legislature sets a statewide goal of reducing per capita urban water use by 20 percent by December 31, 2020. The legislation requires each urban retail water supplier to develop 2015 and 2020 water use targets.

The legislation specifically requires state agencies to reduce their water use to help urban retail water suppliers meet their targets. (Water Code section 10608.44). For the purpose of this management policy, facilities are defined as a building or group of buildings, landscapes and highway landscapes that are operated by state agencies.

The California Global Warming Solutions Act of 2006 requires a reduction of greenhouse gases to a limit equivalent to statewide emission produced in 1990. Approximately one-fifth of the electricity and one-third of the non-power plant natural gas consumed in the state are associated with water delivery, treatment, and use. The reduction of water use at state facilities will reduce greenhouse gas emissions, and help meet statewide emission goals.

---

**Additional Resources**

Department of Water Resources, Water Use and Efficiency Branch:  
<http://www.water.ca.gov/wateruseefficiency/>

SBX7-7: <http://www.water.ca.gov/wateruseefficiency/sb7/docs/SB7-7-TheLaw.pdf>  
Sustainable Sites Initiative: <http://www.sustainablesites.org/>

Greening Federal Facilities: <http://www.nrel.gov/docs/fy01osti/29267.pdf>  
Graywater regulations: <http://www.bsc.ca.gov/>

American Rainwater Catchment Association: <http://www.arcса.org/>

Irrigation Association: <http://www.irrigation.org/>

Establishing Baselines and Meeting Water Conservation Goals of Executive Order 13423 :  
[https://www.fedcenter.gov/kd/Items/actions.cfm?action=Show&item\\_id=14213&destination=ShowItem](https://www.fedcenter.gov/kd/Items/actions.cfm?action=Show&item_id=14213&destination=ShowItem)

Water Smart Guidebook; a Water-Use Efficiency Plan  
<http://www.ebmud.com/sites/default/files/pdfs/WaterSmart-Guidebook.pdf>

California Landscape Contractors Association WMCP (Water Management Certification Program): <http://www.clca.org/water-pro/>

River Friendly Guidelines for Landscape Professionals:  
[http://www.msa.saccounty.net/sactostormwater/RFL/Documents/RiverFriendly\\_Guidelines.pdf](http://www.msa.saccounty.net/sactostormwater/RFL/Documents/RiverFriendly_Guidelines.pdf)

Green California: <http://www.green.ca.gov/Resources.aspx>

Water sense: [http://www.epa.gov/watersense/outdoor/irrigation\\_professionals.html](http://www.epa.gov/watersense/outdoor/irrigation_professionals.html)

CalGreen: <http://www.bsc.ca.gov/Home/CALGreen.aspx>

---

**Contact**

For more information, contact:

Department of Water Resources, Water Use and Efficiency Branch at  
916.651.9676

---

**Signature**

  
Fred Klass, Director  
Department of General Services