

## **MOU Compliance Policies**

California Urban Water Conservation Council

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# **MOU Compliance Policies**

### **Section 1. Exemption Due Date**

- 1.1 Signatory water suppliers shall submit exemptions to the Council within five (5) months following the start of the reporting period for which the exemptions are being claimed.

*(Approved by the Steering Committee February 3, 2005)*

### **Section 2. Process for Evaluation and Disposition of PBMPs**

- 2.1 A PBMP (Potential Best Management Practice) shall be defined as follows: any device, program, technology or practice that, based on the expertise and recommendation of the Board of Directors or any Council committee, has the potential for cost-effective, practical water conservation implementation.
- 2.2 The Board of Directors and subject area committees of the Council shall be involved in the evaluation and disposition of a PBMP, as follows:
- a) Within the first three months of any calendar year ending in an odd number (e.g. 2005), each subject area committee (Residential, CII, Landscape, and Utility Operations) shall evaluate the PBMP list to recommend what changes, additions or deletions should be made. Committees may recommend action on a PBMP at other times at their discretion or at the direction of the Board of Directors.
  - b) The Council's subject area subcommittees (e.g. Landscape, Residential, CII, and Utility Operations) shall have the following responsibilities related to Tier 1 and Tier 2 PBMPs:
    - i. Review and evaluate research on a PBMP at the direction of the Board of Directors or on their own volition;
    - ii. Develop a technical basis for a pilot or field study;
    - iii. Make recommendations to the Board of Directors on disposition of a PBMP within the tiers, including adding a PBMP to the tiers.
  - c) The Research and Evaluation Committee shall have the following responsibilities related to Tier 2 PBMPs:

## MOU Compliance Policies

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### California Urban Water Conservation Council

- i. Respond to requests for evaluation of PBMPs from subject area subcommittees;
    - ii. Make recommendations to the Board of Directors on disposition of a PBMP within the tiers, including adding a PBMP to the tiers.
  - d) The Board of Directors has the following authority regarding PBMPs:
    - i. Send a PBMP to any committee for evaluation and recommendation regarding disposition;
    - ii. Adopt or reject the recommendations of committees regarding disposition of PBMPs;
    - iii. Send a committee's recommendation back to the subcommittee for clarification of additional evaluation and/or research;
    - iv. Assign a Project Advisory Committee to determine further action on Tier 2 and Tier 3 PBMPs.
  - e) Council staff shall be responsible for ensuring that the subcommittees are notified of upcoming evaluation deadlines.
- 2.3 Upon listing a PBMP in Tier 3, the Board of Directors shall determine whether or not the PBMP warrants status as a stand-alone BMP or should be incorporated into an existing BMP. The Board of Directors shall direct the PBMP through the BMP revision process including the development of a schedule for implementation and/or necessary changes to the BMP Reporting database.

2.4 The PBMP tiers have been defined as follows:

**Tier 1:** A Tier 1 PBMP does not currently merit inclusion in the BMP list at this time. However, these PBMPs represent technologies, programs, or devices that may have merit in the future. This list shall be evaluated at least once every two years to determine whether or not these PBMPs should be moved to other tiers or the BMP list, or further research conducted. If, within five years of being placed on the Tier 1 list, a PBMP does not progress to another tier and does not seem to warrant further attention, the PBMP shall be removed from the Tier 1 list. (See Section 2.5 for current Tier 1 PBMPs.)

**Tier 2:** A Tier 2 PBMP shows more promise for cost-effective implementation than a Tier 1 PBMP, but needs further evaluation on the following criterion before a decision regarding its BMP status or PBMP priority shall be made:

- a) Cost-effectiveness; and/or
- b) Practical implementation (e.g. customer acceptance and other challenges); and/or
- c) Further testing on operational feasibility.

## **MOU Compliance Policies**

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### California Urban Water Conservation Council

Tier 2 PBMPs shall be evaluated at least once every two years to determine whether or not these PBMPs should be moved to other tiers, or to the BMP list, or further research conducted. (See Section 2.5 for current Tier 2 PBMPs.)

**Tier 3:** A Tier 3 PBMP has successfully met the three criteria identified in Tier 2. A Tier 3 PBMP is a proven operational PBMP that has been tested as a BMP in water agency implementation programs and for which the Council has collected data and prepared a report on implementation of the PBMP. Tier 3 PBMPs should be moved to the BMP list and assigned a schedule of implementation if, after review of data developed during research, and/or demonstration projects, the Council determines that the PBMP is economically reasonable, practical to implement, and otherwise conforms to the definition of BMPs in Section 1.1. (See Section 2.5 for current Tier 3 PBMPs.)

*(Approved by the Steering Committee on May 11, 2005; revised by the Steering Committee on November 9, 2005)*

2.5 The PBMPs have been assigned to Tiers by the Board of Directors as follows:

#### **Tier 1**

- a) On-site Reuse
- b) Evaporation Suppression: customer and utility side
- c) Restrictions or Prohibitions on Devices that use Evaporation to Cool Exterior Spaces
- d) Residential Dishwasher Rebate (existing residences)
- e) CII Plan Review
- f) Highway Speed Sweeper
- g) Wastewater Treatment Plant Effluent Water Recycling
- h) Ordinance and Enforcement Options
- i) Soil Moisture Sensor Technology
- j) Water Saving Pool Filter (dual cycle)
- k) Residential New Construction Guidelines
- l) Non-Standard Plumbing Audits/Research (e.g. showerheads, faucets, toilets)

## **MOU Compliance Policies**

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### California Urban Water Conservation Council

- m) Tankless Water Heaters
- n) Stormwater Capture and Reuse including cisterns or rain barrels; bioswales or berms; dry wells; and pervious pavement installation.

#### **Tier 2**

- a) **Rate Structure and other Economic Incentives and Disincentives to Encourage Water Conservation.** This is the top priority PBMP to be studied. Such studies should include seasonal rates; increasing block rates; connection fee discounts; grant or loan programs to help finance conservation projects; financial incentives to change landscapes; variable hookup fees tied to landscaping; and interruptible water service to large industrial, commercial or public customers. Studies on this PBMP will be initiated within 12 months from the initial signing of the MOU. At least one of these studies will include a pilot project on incentives to encourage landscape water conservation.
- b) Efficiency Standards for Water Using Appliances and Irrigation Devices
- c) Replacement of Existing Water Using Irrigation Devices
- d) Distribution System Pressure Regulation
- e) Water Supplier Billing Records Broken Down by Customer Class
- f) Vehicle Wash System Retrofit
- g) Hot Water Distribution Systems
- h) Structured Plumbing in New Construction
- i) Plumbing Retrofit with on-demand or other re-circulating systems
- j) Efficiency Standards for New Industrial and Commercial Processes
- k) X-ray film processor recycling units (medical industry)
- l) Steam sterilizer retrofits
- m) Residential and small commercial weather-based irrigation controllers
- n) Submetering for Multi-Family Units
- o) Commercial, Industrial & Institutional High Efficiency Toilets (1.3 gpf or less)

## **MOU Compliance Policies**

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### California Urban Water Conservation Council

- p) Commercial-Industrial Cooling Systems
- q) Ice Machines/Ice Makers
- r) Multi-Head Shower Panels
- s) Drip and High Efficiency Irrigation Systems and Equipment including but not limited to spray-heads and valves
- t) Synthetic Turf: Residential
- u) Synthetic Turf: Commercial
- v) Monthly Billing with Historical Data

### **Tier 3**

- a) Pre-rinse spray valves for the food service industry
- b) Commercial Laundry Retrofit
- c) Residential High Efficiency Toilets (1.3 gpf or less)
- d) Commercial, Industrial & Institutional High Efficiency Urinals (0.5 gpf or less)
- e) New and Retrofit Connectionless Food Steamers
- f) Residential Dishwashers in New Construction
- g) Vehicle Wash System: New Construction Ordinance

*(Approved by the Steering Committee on November 9, 2005; revised by the Steering Committee on May 3, 2006 and July 30, 2007.)*

### **Section 3. Flex Track Menu**

#### **2008 Flex Track Menus**

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Agencies choosing the Flex Track option are responsible for achieving water savings greater than or equal to that which they would have achieved using only the BMP list items. The Flex Track Menu will be maintained and regularly updated in the MOU Compliance Policies. Three Flex Track Menus are found below for the Residential, CII, and Landscape BMPs. These were developed by the BMP Revision Committees in 2008, and will be updated from time-

## MOU Compliance Policies

California Urban Water Conservation Council

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time by the Research and Evaluation Committee. These will be maintained in the CUWCC MOU Compliance Policy and BMP Guidebooks.

### Residential Flex Track Menu

- 1) High bill contact with single-family and multi-family customers.
- 2) Educate residential customers about the behavioral aspects of water conservation.
- 3) Notify residential customers of leaks on the customer's side of the meter.
- 4) Provide bill or surcharge refunds for customers to repair leaks on the customer's side of the meter.
- 5) Provide unique water saving fixtures that are not included in the BMP list above.
- 6) Install residence water use monitors.
- 7) Participate in programs that provide residences with school water conservation kits.
- 8) Implement an automatic meter reading program for residential customers.
- 9) Refer to the landscape BMP for the Flex Track menu of landscape measures.

Any other programs that the signatory may implement for residential users that result in documented water savings.

### Commercial, Industrial and Institutional *Demonstrated Savings List and Flex Track Menu*

#### A. CII Demonstrated Savings Measure List

<b>Measure</b>	<b>Annual Savings (acre-feet)</b>	<b>Measure Life (years)</b>
1. Hi-Efficiency Toilets	.041748	25
2. Hi-Efficiency Urinals	.069086	25
3. Ultra Low Volume Urinals	.080603	25
4. Zero Consumption Urinals	.0921146	25
5. Commercial High-	0.116618	10

## MOU Compliance Policies

California Urban Water Conservation Council

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<i>Efficiency Single Load Clothes Washers</i>		
<i>6. Cooling Tower Conductivity Controllers</i>	<i>1.032250</i>	<i>5</i>
<i>7. Cooling Tower pH Controllers</i>	<i>3.981543</i>	<i>5</i>
<i>8. Connectionless Food Steamers</i>	<i>Per Steamer Compartment .25</i>	<i>10</i>
<i>9. Medical Equipment Steam Sterilizers</i>	<i>1.538</i>	<i>20</i>
<i>10. Water-Efficient Ice Machines</i>	<i>0.834507</i>	<i>10</i>
<i>11. Pressurized Water Brooms</i>	<i>0.1534</i>	<i>5</i>
<i>12. Dry Vacuum Pumps</i>	<i>0.64</i>	<i>7</i>

*(Approved by the Plenary June 9, 2010)*

### **B. Flex Track Menu items**

1. Industrial Process Water Use Reduction
  - a) Recycling
  - b) Deionization
2. Commercial Laundry Retrofits
3. Industrial Laundry Retrofits
4. Filter Upgrades
5. Car Wash Reclamation Systems
6. Wet Cleaning
7. Water Audits
8. Clean In Place (CIP) Technology
9. Waterless Wok
10. Alternative On-site Water Sources
  - a) Cooling Condensate
  - b) Foundation Drain Water

## MOU Compliance Policies

### California Urban Water Conservation Council

- c) Gray Water
  - d) Storm Water
  - e) Rain Water
  - f) Pond and Water Feature Recycling
- 11) Sub-metering
  - 12) Pool Covers
  - 13) High Efficiency Showerheads
  - 14) Faucet Flow Restrictions
  - 15) Water Efficient Dishwashers
  - 16) Hot Water on Demand
  - 17) Pre-rinse Spray Valves of 1.2 gpm (gallons per minute) or less
  - 18) Central Flush Systems
  - 19) Other Measures chosen by the Agency

### Landscape Flex Track Menu

	Measure*	Documentation
<b>1. Monitor and report on landscape water use</b>		
1a.	Measure landscapes and develop water budgets for customers with dedicated landscape meters. Provide timely water use reports with comparisons of water use to budget (through bills, electronically, by mail or other means) that provide customers the information they need to adjust irrigation schedules.	# number of sites with dedicated meters, number of sites with landscape measurements and water budgets, number of sites to be measured and provided water budgets each of the next 10 years, estimated water savings
1b.	Measure landscapes and develop water budgets for customers with mixed meters. Provide timely water use reports with comparisons of water use to budget (through bills, electronically, by mail or other means) that provide customers the information they need to adjust irrigation schedules.	# number of sites with mixed meters, number of sites with landscape measurements and water budgets, number of sites to be measured and provided water budgets each of the next 10 years, estimated water savings
1c.	Establish agency-wide water budget.	# water budget, amount of water used (AF/acre)
1d.	Establish agency-wide, sector-based irrigation goal to reduce water use, based on seasonality.	# minimum irrigation goal (AF/acre compared seasonally)
<b>2. Provide technical landscape resources and training</b>		



## MOU Compliance Policies

### California Urban Water Conservation Council

2a.	Upon customer requests, provide landscape irrigation management and landscape design information and resources: provide assistance, answer customer questions, respond to run-off and high-bill calls.	# number of contacts: calls in person, over the phone, or via e-mail, estimated water savings
2b.	Perform landscape & irrigation audits: including irrigation scheduling, plant information, and landscape area measurement.	# number of audits conducted per year, measurement of square footage of turf, non-turf areas, estimated water savings
2c.	Sponsor, co-sponsor, promote, or support landscape workshops, training, presentations and other technical educational events for homeowners and professionals: design, installation, maintenance, water management (gardeners, contractors, landscape architects/designers, irrigation specialists, irrigation equipment manufacturers and distributors, nurseries, retailers, homeowners associations, property managers, etc.).	# number of events, number of participants, list title or type of events
2d.	Establish time-of-day irrigation restrictions.	Y/N describe restrictions
<b>3. Provide incentives</b>		
3a.	Establish landscape budget-based rates.	Y/N describe rates
3b.	Provide incentives for conversions from mixed-use meters to dedicated landscape meters.	# number of conversions, estimated water savings
3c.	Provide incentives for installing sub-meters to separate landscape water use.	# number of sub-meters installed, estimated water savings
3d.	Provide incentives for irrigation equipment upgrades that improve distribution uniformity, irrigation efficiency, or scheduling capabilities (i.e. controllers, emitters, soil moisture sensors, pressure regulators, rain shut off devices, etc.).	# number of devices/systems installed, estimated water savings
3e.	Provide incentives for the reduction of water use over an irrigated area, or reduction in the size of the irrigated area due to replacement of turf or other high water-using plants with low water-using plants, artificial turf, or permeable surfaces.	# acreage of turf replaced, reduced acreage of irrigated landscape, estimated water savings
3f.	Provide incentives for conversions from potable to recycled water.	# number of conversions, number of incentives, funds invested, estimated water savings
3g.	Provide incentives for the use of alternative sources of water in the landscape (i.e. graywater, rainwater, cisterns, etc.).	# number of conversions, number of incentives, funds invested, estimated water savings
<b>4. Participate in local and regional planning and regulatory activities</b>		
4a.	Collaborate with planning agencies at the local and regional level, other water suppliers in the area and stakeholders in response to state or federal requirements such as the State Model Water Efficient Landscape Ordinance and AB 1881. Participate in the development, review, implementation, and enforcement of requirements for new developments. Provide water use data to planning agencies.	Y/N, describe involvement
4b.	Establish or participate in a water conservation advisory committee or other community outreach effort to drive market transformation and exchange information about landscape water conservation with developers, community-based organizations, homeowners associations, residential customers, landscape professionals, educators, other water suppliers in region.	Y/N, describe involvement
4c.	Participate in regional efforts: integrated water resource management, watershed management, NPDES permit agencies,	Y/N, describe involvement

## MOU Compliance Policies

California Urban Water Conservation Council

	etc.	
<b>5. Develop a holistic approach to landscape water use efficiency</b>		
5a.	Develop and implement a comprehensive landscape water conservation program for all customers. Target marketing efforts to those most likely to result in benefits to both customer and Agency.	
<b>6. Other Measures</b>		

(Approved by the Plenary June 11, 2009)

### Section 4. GPCD Compliance Option

## MOU Compliance: GPCD Reduction Option

*This GPCD target is 18% reduction by 2018 for the purpose of using the same timeframe as the CUWCC's MOU. It is one of three compliance options, including the traditional BMP approach, and the Flex Track approach. The specific compliance method provided herein is not intended to be a one size fits all solution to the complex issue of GPCD reduction for a water agency. However, as one compliance method among others, it does provide an agency an opportunity, if appropriate, to use GPCD Compliance as a simplified reporting mechanism.*

**Potable Water GPCD** shall equal  $(PWI - PWS) / Pop / 365$ ; where

1. PWI = Potable Water Into the retail water agency's service area distribution system.
2. PWS = Potable Water taken out of the retail water agency's service area distribution system and:
  - placed into storage and/or
  - delivered to an agricultural customer through a dedicated agricultural meter, at discretion of the retail water agency.
3. Pop = residential population of the retail water agency's service area (using Cal Dept of Finance statistic when those statistics are available and adjusted to include the population outside a retail agency's normal service area when these are served by the retail agency)."

For retail water agency service areas not geographically continuous with census data: Pop = number of service area connections x most recent census data "average number of persons per household (PPH)."

### **Baseline GPCD**

The Baseline GPCD shall equal the average annual Potable Water GPCD for the years 1997 through 2006 (fiscal or calendar year, at the discretion of the retail water agency, so long as all calculations from an agency are consistent).

### **GPCD Target**

## MOU Compliance Policies

California Urban Water Conservation Council

For purposes of compliance the 2018 GPCD Target for all signatories as of July 1, 2009 shall equal Baseline GPCD multiplied by 0.82 (an 18% reduction).

### Biennial GPCD Targets

Using the Compliance Table below, for each “Year” in the table, a retail water agency’s Biennial GPCD Target shall equal its Baseline GPCD multiplied by that year’s Target (% Baseline). A retail water agency may choose a starting point as either its Baseline GPCD or its 2006 Potable Water GPCD.

### Compliance

First Biennial Report: For retail water agencies choosing the GPCD Option for compliance with the Programmatic BMPs, the retail water agency shall submit the following calculations along with supporting data as part of their **first biennial report**:

- (1) Potable Water GPCD for each year in the baseline period;
- (2) 2018 GPCD Target and four other Biennial GPCD Targets; and

All Biennial Reports: A retail water agency shall be considered to be in compliance with the Programmatic BMPs in any reporting period when it submits the following:

- (1) Complete “Water Supply & Reuse” and “Accounts & Water Use” standard reports;
- (2) Supporting data necessary to calculate that reporting period’s Potable Water GPCD; and
- (3) Calculations showing the reporting period’s Potable Water GPCD is less than or equal to that period’s Biennial GPCD Target, or Highest Acceptable Bound after weather normalization.
- (4) Calculation of and data (for example: ETo, rainfall, and solar radiation) necessary to make the weather normalization adjustment. Compliance will be evaluated in relation to the Compliance Table below and relative progress toward the goal will be acknowledged in Council Compliance Reports. For retail water agencies signing the MOU after July 1, 2009, the compliance table will be read as five increments with reporting goals relative to their 1<sup>st</sup> through 5<sup>th</sup> Compliance reports.

### Compliance Table

Year	Compliance Report	Target (% Baseline)	Highest Acceptable Bound (% Baseline)
2010	1	96.4	100

## MOU Compliance Policies

California Urban Water Conservation Council

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<b>2012</b>	<b>2</b>	<b>92.8</b>	<b>96.4</b>
<b>2014</b>	<b>3</b>	<b>89.2</b>	<b>92.8</b>
<b>2016</b>	<b>4</b>	<b>85.6</b>	<b>89.2</b>
<b>2018</b>	<b>5</b>	<b>82</b>	<b>82</b>

### Appeals

1. An Appeals Committee shall be created to review appeals related to items listed below. The Appeals Committee will be comprised of two members of Group 1 and two members of Group 2, and will require a unanimous decision to grant an appeal. All denials shall be in writing to the signatory. A signatory may resubmit their appeal with additional information in response to the Appeal Committee's decision for a follow-up review.
2. Retail water agencies that can substantiate exceptional impacts to GPCD such as exceptional use of potable water for wildfire suppression and significant changes to a signatory's economic or customer demographics (i.e. unusually large unavoidable increase in CII demand) may file an appeal to adjust that year's GPCD Compliance Target.
3. Retail water agencies that signed the MOU prior to 1997 (the beginning of the Baseline Period), and that can substantiate significant investments in conservation leading to declines in water consumption as measured by GPCD, may file an appeal to adjust the baseline period to reflect per capita water demands in the period prior to their signing the MOU and prior to their significant investments in conservation.

### Other

1. CUWCC staff may make non-substantive additions/ reporting requirements changes deemed necessary to implement this BMP compliance option, with approval of the Board of Directors.
2. Foundational BMP 1.1(3)(c), regarding Wholesale Agency Program Management and Assistance, applies to all retail agencies including those meeting GPCD compliance requirements. i
3. CUWCC GPCD subcommittee shall provide, no later than December 31, 2009, acceptable methods retail water agencies may use when weather normalizing data for compliance with this BMP. Additional methods or revisions to these methods may be approved by the Board of Directors from time-to-time.
4. Both weather-adjusted and non-adjusted GPCD shall be displayed in the CUWCC online report.

## MOU Compliance Policies

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### California Urban Water Conservation Council

i This footnote is not to be included in the actual BMP, it is provided here as a convenience to CUWCC members. The following is the language referenced in Foundational BMP

1.1(3)(c):

#### Foundational BMP

##### 1. Utility Operations Programs

##### 1.1 Operations Practices, A. Implementation

##### 3) Wholesale agency assistance programs

##### c) Program management

When mutually advantageous, wholesale and retail water agencies will join together to plan, design, implement, manage, and evaluate regional conservation programs.

When mutually agreeable and beneficial, the wholesale agency or another lead regional agency will operate all or part of the conservation program; if the wholesale agency or other lead regional agency operates all or part of a program, then it may, by mutual consent with the retail agency, assume responsibility for CUWCC reporting for funded BMPs; under this arrangement, a wholesale agency or other lead regional agency may aggregate all or portions of the reporting and coverage requirements of all retail agencies joining into the mutual consent.