



# Association of California Water Agencies

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(12/7/15) Public Workshop  
Urban Water Conservation  
Deadline: 12/2/15 by 12:00 noon

November 30, 2015



Delivered by e-mail to: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

The Honorable Felicia Marcus, Chair  
and Members of the State Water Resources Control Board  
c/o Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: "Comment Letter – Urban Water Conservation Workshop"

Dear Chair Marcus and Members of the Board:

The Association of California Water Agencies (ACWA) appreciates this opportunity to comment on the potential extension and modification of the existing Emergency Regulation for Statewide Urban Water Conservation (Emergency Regulation) if drought conditions persist into 2016. We appreciate the willingness of the State Water Resources Control Board (State Water Board) to engage water agencies and other stakeholders in a series of work group meetings and to schedule the public workshop on December 7 to receive broad input on this significant policy decision.

ACWA represents over 430 public water agencies which are responsible for delivery of over 90% of the water used for residential, commercial and agricultural purposes in California. Water agencies statewide have been responding effectively on many levels to help Californians successfully weather the current unprecedented drought. The Emergency Regulation adopted by the State Water Board on May 5, 2015 in response to the Governor's April 1 Executive Order has resulted, as hoped, in sharply reduced urban water use. That said, significant issues of equity, unintended consequences, and insights gained require modifications to the Emergency Regulation if it needs to be extended into 2016.

Governor Brown explicitly provided the opportunity in his November 13 Executive Order which requires the State Water Board to extend the Emergency Regulation through October 2016 if the drought continues through January 2016. This Executive Order directs the State Water Board to consider modifying the restrictions **to address uses of potable and non-potable water, as well as to incorporate insights gained from the existing restrictions** (Executive Order B-36-15).

ACWA appreciates that the State Water Board staff had solicited proposals for such modifications at the end of the August 26 work group meeting. Immediately thereafter, several participating water agencies reached out to colleagues to form ad-hoc teams to develop topic-specific proposals intended to address several equity and water policy issues that have been the focus of widespread attention by water agencies statewide. The water agencies then refined these proposals and presented them at the State Water Board work group meeting on October 26. The proposals address the following issues:

- Climate Adjustment
- Growth Adjustment
- Recycled Water Adjustment
- Sustainable Supplies Credits (desalination, potable reuse, and conserved water transfers)
- Groundwater Credits
- Regional Compliance Option

Each proposal was designed to 1) be complementary to the other proposals; 2) voluntary; 3) based on information submitted to the State Water Board that would be simple to evaluate; and 4) simple to administer. The effect would be to refine the Conservation Standards assigned to water agencies for the duration of the 2016 Emergency Regulation. These proposals are summarized by one-page fact sheets, which are attached to this letter. More detailed descriptions of each proposal have been previously submitted to the State Water Board and are posted, along with information about the work group process, on the ACWA website at <http://www.acwa.com/content/urban-water-conservation>.

ACWA supports and endorses all of these proposals for the reasons that are described below under “Elements of the Existing Regulation that Should be Modified.” The equity, sustainability and water policy considerations that these proposals were designed to address are recognized as serious concerns statewide. These proposals are widely supported by water agencies, and if they are used to make adjustment in the 2016 regulation, ACWA believes the result will substantially mitigate these concerns and help provide broader support for the Emergency Regulation.

### **Workshop Questions**

In order to help frame input, the notice for the December 7 workshop indicated that the State Water Board is interested in receiving public input on the following three questions:

1. What elements of the existing emergency regulation, if any, should be modified in an extended emergency regulation?
2. What additional data, if any, should the State Water Board be collecting through the emergency regulation and how should it be used?

3. How should the State Water Board account for precipitation after January 2016 in its implementation of any extension of the emergency regulation?

ACWA offers the following responses to these questions.

### **1. Elements of the Existing Regulation that Should be Modified**

ACWA recommends that the State Water Board modify the Emergency Regulation to incorporate adjustments to address widely recognized equity, sustainability and public policy considerations. The key modifications and supporting rationale are as follows:

#### **a. Incorporate Proposals Developed by Water Agencies to Address Equity Issues in any Extension or Modification of the Emergency Regulation**

Although the 2015 Emergency Regulation has resulted in significant water savings statewide, achieving the mandatory 25 percent statewide reduction in potable water use so far, the results have been uneven and have been achieved at extremely high cost. Additionally, it is widely recognized that significant seasonal reductions in outdoor irrigation during the upcoming winter months will significantly reduce the total amount of water that Californian's are able to save and so will derail the efforts of many water agencies to meet their individual Conservation Standards. This, in turn, will probably undermine the cumulative statewide water use reduction results when the current Emergency Regulation expires on February 13, 2016.

The equity issues and sustainability concerns associated with the current Emergency Regulation are combined with significant public policy considerations, such as widespread and substantial water agency revenue losses, additional administrative and conservation program cost increases, adverse water user reactions to rate increases, and creation of a general disincentive for on-going local water supply reliability investments, and are all among "*insights gained*" that can, and should, be addressed in the 2016 Emergency Regulation.

With regard to water agency revenue losses and additional program cost increases, a recent survey by ACWA and the California Municipal Utilities Association has found that the Emergency Regulation is estimated to have a total financial impact (revenue losses and additional costs for conservation-related programs) of more than **\$500 million** for the 270 day period (June 2015-February 2016) for the 73 agencies that responded to the survey. If the survey responses are representative, total revenue impacts could amount to a combined total of more than **\$3 billion** for the over 400 water suppliers subject to the regulation. Additional revenue losses and added costs for wholesale agencies and water suppliers with fewer than 3,000 service connections are not included in that figure and would certainly drive the total significantly higher. State Water Board had estimated the Emergency Regulation would have a *total* combined fiscal impact of \$500 million statewide.

This current level of financial impact is not sustainable for most water agencies. Although significant and sustained rate increases and drought surcharges are being widely implemented, these lost revenues mean that water agencies have that much less funding immediately available to maintain and upgrade their water systems, invest in local resources development and provide matching funds to secure grants under Proposition 1. Continued loss of revenues could affect the ability of agencies to maintain their systems and could begin to affect credit ratings for some agencies. The results of this survey are “eye-opening” and will be made available in writing and described in more detail during the December 7 workshop.

Clearly, the response in light of a possible continuation of the drought cannot be a return to “business as usual” for water use in California. But, an extension of the Emergency Regulation for 2016 needs to incorporate modifications to address insights gained from the existing restrictions.

**Climate Adjustment** – The climate adjustment proposal would be implemented by a one-time adjustment to the individual water agency’s Conservation Standard calculated from the deviation between statewide and individual agency’s evapotranspiration (ET) values for the months of July, August, and September 2014. For illustrative purposes the deviation has been calculated using the default ET values published by California Irrigation Management Information System (CIMIS) for the state’s 18 climate zones, but for greater precision this adjustment should incorporate the individual agency’s self-reported evapotranspiration (ET) values. The need for a climate adjustment is based fact that all plant materials, including so-called “California friendly” plants, **require additional water in more arid regions of the state than they require in more temperate locations.** The 2015 Conservation Standards were established based only on total water production relative to population but did not account for relative differences to geography, location, or climate. Establishing climate-based irrigation standards using ET is a key element of the state’s Water Efficient Landscape Ordinance and is necessary to preserve the viability of established trees and shrubs as well as the “California friendly” landscapes, which are replacing non-functional lawns throughout the state. The cumulative effect of a making this climate adjustment would be to reduce the total conserved water statewide by less than 3 percent. This adjustment would go a long way to achieving fair water use reductions statewide. This proposal is summarized in an attached Fact Sheet and will be presented during the workshop.

**Growth Adjustment** – The growth adjustment would be calculated monthly based on new water service connections and associated increased demand added to the 2013 production baseline to create a new adjusted baseline for the individual water agencies that are experiencing growth. This adjustment is needed to address population and economic growth that has occurred since 2013 in some parts of the state. As the number of service connections has increased, these growth areas have had a functional increase in their Conservation Standard as they accommodate increasing water demand relative to the “steady-state” water agencies that have not experienced such growth. This impact is significant for those agencies

experiencing such growth, and not addressing it is not equitable. But it can be rectified with no real adverse impact to Conservation Standards as described in the attached Fact Sheet and as will be described during the workshop.

**Recycled Water Adjustment** - The recycled water adjustment would be based on the proportion of potable water production to non-potable recycled water production, adjusting the monthly potable production number reported. This adjustment is needed for agencies that supply a substantial amount of recycled water for outdoor irrigation so as to avoid disproportionately penalizing an agency's potable water customers, resulting in a de-facto increase in the Conservation Standard for these agencies. Because non-potable water is not currently subject to the water use reduction requirement, agencies with a large proportion of their total outdoor irrigation served by non-potable recycled water (typically commercial, industrial and institutional customers) must currently demand greater water use reductions from (typically residential) potable water customers. Since recycled water production varies monthly, the adjustment would be subtracted from the monthly production for the agency and the adjusted number would be reported to the State Water Board. This proposal is summarized in an attached Fact Sheet and will be presented during the workshop.

**Sustainable Supplies Credits** - This proposal would allow water agencies to apply new supplies in combination with continued water conservation savings to achieve their Conservation Standard. This credit is needed to support on-going local water supply reliability investments as advocated in the California Water Action Plan. Water agencies should not be penalized for having planned and invested for dry times – this is exactly what they should be doing. Such actions have been critical to California's ability to weather this drought. New water supplies such as desalination, potable reuse, and conserved water transfers "bring more water to the table." Rather than imposing demand reduction measures without regard to such new supply investments that have been made at substantial cost in many communities to enhance water reliability and mitigate the impacts of drought, this credit would recognize such investments. It would also avoid a signal against such investments which are critical to water supply reliability. This proposal is summarized in an attached Fact Sheet and will be presented during the workshop.

**Groundwater Credits** – This proposal would allow agencies to designate water supplies associated with sustainable groundwater banking and conjunctive use projects in combination with continued water conservation savings to achieve their Conservation Standard. This credit is needed to support on-going local groundwater management investments that are advocated in the California Water Action Plan and which will be incorporated in Groundwater Sustainability Plans under the Sustainable Groundwater Management Act of 2014. Existing and "proven" groundwater supplies also "bring more water to the table" and should be incentivized as among the on-going investments that enhance local water reliability and mitigate the impacts of drought. This proposal would consider collective actions by multiple water providers in groundwater basins or subbasins and require projects to meet specified eligibility

requirements that are described in the attached Fact Sheet and which will be presented during the workshop.

**b. Modify The Statewide 25 Percent Conservation Requirement**

The adjustment proposals described above are based on the key policy principle that the modifications to the Emergency Regulation should **not** result in raising the Conservation Standard for any water agency. The State Water Board established Conservation Standards for individual water agencies to achieve the statewide 25 percent reduction in potable water usage as required by the April 1 Executive Order, but these Conservation Standards now need to be adjusted to address the inequities and policy problems described above. Adjustments that unreasonably shift the burden between water agencies to achieve a pre-conceived outcome (such as the 25 percent goal) can be avoided by recalculating the total water production savings that can be achieved after application of the adopted adjustments and credits actually used for all water agencies affected by the regulation. Then a sustainable overall statewide target can be calculated and reported for the duration of the 2016 regulation, as is currently the case. The Governor's November 13, 2015 Executive Order does not specify a 2016 numeric conservation requirement for statewide reduction in urban potable water use, and it explicitly authorizes the State Water Board to make modifications. The State Water Board clearly has authority to impose a lower overall conservation requirement.

**c. Add a Regional Compliance Option**

ACWA supports adding a Regional Compliance Option to the Emergency Regulation. The Regional Compliance Option was designed to achieve the same water savings as would be achieved by the participating individual water agencies. It would be based on voluntary participation by adjacent water agencies based on an existing structure of "regional alliances" as administered by the Department of Water Resources (DWR) to implement SB7X7 (2009). Proponents of a regional compliance option believe they could achieve significant administrative and public outreach efficiencies and could more effectively assist agencies that are struggling to meet their Conservation Standards. Individual agency compliance reporting would continue to be public, and success of the individual participating agencies would be key to success of the regional group. Several groups of water agencies in different parts of the state are interested in implementing this option. There is no downside risk to the State Water Board regulatory program to in offering this option, and it could empower water agencies to even greater regional conservation savings in 2016.

**d. Add a "Rollover Credit" for 2015 Compliance Above Conservation Standard**

ACWA supports adding a "rollover credit" for individual water agencies that at the expiration of the 2015 regulation have water production savings that have exceeded exceeding their

Conservation Standard. This credit would be "rolled over" to the 2016 extension period and would apply to individual agency or regional compliance (assuming that this option is adopted).

#### **e. Retain Key Elements of The 2015 Regulation**

Several elements of the 2015 regulation that have been effective and well-administered should be retained in any 2016 extension, including:

- Agricultural Water Use Exclusion
- Four Percent Reserve Tier for Surface Storage
- Alternate Methods of Compliance

### **2. Additional Data**

There is no need to add additional data submittal requirements to the regulation, except as necessary to implement the proposed climate and growth adjustments (i.e. ET data and service connections data).

### **3. Accounting for Precipitation After January 2016**

The State Water Board should reduce the Conservation Standards or sunset the emergency regulation if precipitation levels or runoff projections on April 1 indicate that a drought emergency no longer exists. It is extremely important for the State Water Board and water agencies maintain credibility with California's water users regarding any demonstrable need for emergency conservation in the remaining months of 2016.

It may be possible and advisable to establish "triggers" for regions or individual agencies based on a nexus between the mandated Conservation Standard and current local water supply conditions. The State Board could scale back the applicable Conservation Standard for individual agencies when sufficient water supply as determined by reported water storage levels are sufficient to meet the region or agency needs.

We encourage the State Water Board to work closely with the Administration's Drought Management Team and staff of the DWR, and to collaborate with other water resources managers and ACWA, to consider how to structure this extremely important element of the 2016 Emergency Regulation.

### **Long-Term Urban Water Conservation Policy**

The recommendations proposed in this comment letter are for adjustments to the Emergency Regulation for 2016, if an extension of the Emergency Regulation is necessary, but they should not be considered as directly applicable to a broader discussion on long-term urban water

The Honorable Felicia Marcus, Chair

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conservation policy. ACWA looks forward to working with the State Water Board, the DWR, the water community, and other stakeholders to consider how the current (non-emergency) urban water conservation policy and regulatory framework may be refined to support and complement the state's broader, long-term water supply reliability objectives.

ACWA looks forward to working with the State Water Board and other stakeholders to develop these and other promising ideas for reasonable adjustments in the Emergency Regulation that may emerge during the workshop process. Thank you for your consideration of these comments. If you have any questions, please contact me at [daveb@acwa.com](mailto:daveb@acwa.com) or (916) 441-4545.

Sincerely,

A handwritten signature in black ink that reads "David E. Bolland". The signature is written in a cursive style and is contained within a thin black rectangular border.

David Bolland  
Special Projects Manager

cc: Mr. Wade Crowfoot, Deputy Cabinet Secretary, Office of Governor Edmund G. Brown Jr.  
Mr. Tom Howard, Executive Director, State Water Board  
Ms. Caren Trgovcich, Chief Deputy Director, State Water Board  
Mr. Eric Oppenheimer, Director of the State Water Board's Office of Research, Planning and Performance, State Water Board  
Mr. Max Gomberg, Climate Change Mitigation Strategist, State Water Board  
Mr. Timothy H. Quinn, Executive Director, ACWA  
Ms. Cindy Tuck, Deputy Executive Director for Government Relations, ACWA

# Climate Equity Adjustment

## November 2015

### **Background: The Significance of Evapotranspiration (ET)**

The California Irrigation Management Information System (CIMIS) has divided California into 18 climate zones. CIMIS, sponsored by the Department of Water Resources, has more than 150 climate monitoring stations throughout the state, and provides data that is accessible online and free to the public. The data includes temperature, relative humidity, solar radiation, and wind speed for each station. When assembled through formulas, this information becomes Evapotranspiration (ET<sub>o</sub>), the amount of water that evaporates from soil and plant surfaces, and transpires through a known plant crop. The reference crop at most CIMIS stations in California is clipped tall fescue grass. Using plant factors developed by horticultural experts, the reference crop can be compared to other plant species. Through a collaborative work product titled, *The Water Use Classification of Landscape Species (WUCOLS)*, six regional teams of experts, in conjunction with staff from the California Center for Urban Horticulture, the Department of Water Resources, and the University of California, Davis, have divided landscape species into water use categories. The plant groupings are defined by water need as a percent of ET<sub>o</sub>. The recently updated 2015 State Model Water Use Efficiency Landscape Ordinance establishes maximum allowable water application to planted landscapes based on local ET. Evapotranspiration data is important to the appropriate water management of our urban landscapes.

### **The need for Climate Equity**

Trees and shrubs—even climate-appropriate species—require additional water in more arid regions of the state than they do in temperate locations. The May 2015 Conservation Standards considered total water production relative to population, but not relative to geography, location, or climate. Based on insights gained in the first Emergency Reduction period beginning June 2015, a climate equity adjustment will preserve the long-term viability of established trees and shrubs as well as the drought tolerant landscapes that have recently replaced non-functional lawns throughout the state. Climate-appropriate trees and shrubs beautify, add value, and cool the areas many residents of California call “home.” Providing a reasonable equity adjustment based on known science will protect our investments, our homes, and California’s rich botanical heritage.

### **Adjustment Methodology**

We have developed a single statewide average monthly ET for July, August, and September. A one-time adjustment to the Conservation Standard (as assigned in May 2015 for each of the 400+ reporting water agencies) can be calculated based on each reporting agency’s deviation from the Statewide ET value. For modeling efforts, the deviation was calculated using the *default* ET values published by CIMIS for the state’s 18 climate zones. If our methodology is adopted, each agency should provide *local* ET values for the months of July, August, and September 2014 to ensure equity across the state.

The following formula mathematically depicts an example of the climate equity adjustment where the local supplier’s May 2015 Conservation Standard (CS) is 28% and its local ET is 15% higher than the statewide average ET. The resultant CS is 24%.

$$28\% * (1 - 15\%) = 24\%$$

### **Example**

	<b>Supplier A</b>	<b>Supplier B</b>
Climate	Wetter, Cooler	Hotter, Drier
Average Evapotranspiration, July — September (inches)	14.86	21.52
July–September Water Need for 1,000 sf of Efficient Landscaping (gallons per thousand sq. ft.) <sup>1</sup>	5,095	7,378
Original Conservation Standard for Each Supplier	16%	28%
Adjusted Conservation Standard	16%	24% <sup>2</sup>
Reduction Requirement for Landscape (gallons per thousand sq. ft.)	1,630	3,541

1. Maximum Allowable Water Application for 1,000 sq. ft. of Area and ETAF of 0.55 (Model Water Efficient Landscape Ordinance, 2015)

2. 15 percent Local ET deviation from the State for Supplier B

### **Impact to Statewide Water Savings**

Adhering to our policy principle that no water agency should have their May 2015-assigned Conservation Standard increased because of another region’s need for an adjustment, the model lowers the statewide reduction from 24.9 percent or 1,239,000 acre-feet to 22.6 percent or 1,124,354 acre-feet for the period June 2015 through February 2016. The Microsoft Excel model can be made available upon request.

## Equity Adjustment for Economic Growth

November, 2015

### Why an Equity Adjustment for Economic Growth is Needed

- There has been variability in growth across the State since 2013. Some water agencies have added significant new connections and associated water demands since 2013 as a result of strong economic growth since 2013.
- The additional water demand from the growth is not accounted for in the current regulation.
- Agencies with growth since 2013 have to reduce all of their customers' demands much more than their required Conservation Standard, as shown in the table below.
- Requiring agencies that are experiencing growth and economic recovery to disproportionately decrease water use to meet their required Conservation Standard is clearly inequitable and not the intent of the Emergency Regulation.

### *Growth Impacts on Water Demand Reduction Requirements*

	Agency A	Agency B
Growth Since 2013	None	6% Growth
2013 Baseline Active Service Connections	85,000	85,000
2015 Reporting Year Service Connections	85,000	90,000
Increase in number of active service connections	0	5,000
AF per active service connection	0.071	0.071
2013 Monthly Baseline Production, AF	6,000	6,000
Increase in Demand due to Growth	0	353
<b>Conservation Standard</b>	<b>28%</b>	<b>28%</b>
Production Target, AF	<b>4,320</b>	<b>4,320</b>
Water Savings to Meet Required Reduction Target, AF	1,680	2,033
Actual Percent Reduction to Meet Target	28%	<b>34%</b>

### Adjustment to Provide Equity

- Agencies experiencing growth since 2013 should be given an adjustment in the form of an increase to the agency's 2013 "baseline" demand.
- The adjustment needs to be agency specific. Population change does not incorporate demands from new business and industry, and therefore use of demand per service connection is proposed.
- This baseline demand adjustment would be calculated each month to account for on-going growth since 2013. The additional demand from the growth would be added to the 2013 production baseline. This proposed adjustment would be calculated in two steps:
  1. Estimate Monthly Demand from New Development:  
$$\text{Monthly Demand 2013/Number of Connections} = \text{Demand per Connection}$$
  
$$\text{Number of New Connections} \times \text{Demand per Connection} = \text{Demand from New Development}$$
  2. Adjust 2013 Monthly Baseline Production:  
$$\text{2013 Monthly Production} + \text{Demand from New Development} = \text{Adjusted Baseline}$$

### Impact of the Equity Adjustment

- No agency should have targets adjusted upward to offset equity adjustments. Use of the adjustment would be at the discretion of the water supplier.
- As a proxy to estimate the impact of the economic growth adjustment to statewide water savings, statewide population data shows average growth of 1.8% since 2013.

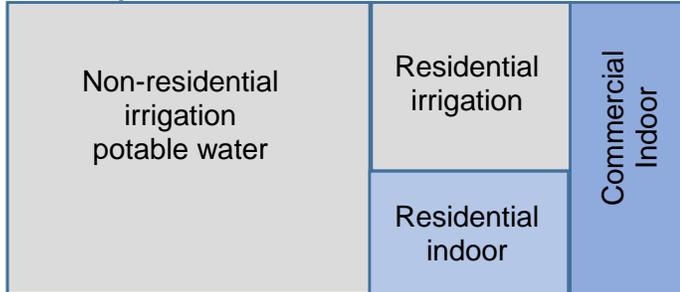
### Benefit of the Equity Adjustment

- Maintains equity where the effective Conservation Standard for each agency is maintained, in this case, at 28%; even though Agency B has experienced increased demands from growth.
- The emergency regulation does not inhibit the State's ongoing economic recovery and growth.

## Recycled Water Equity Adjustment

### Need for Adjustment

- The use of recycled water in lieu of potable water to meet irrigation is a highly effective means of reducing the demand on local and imported water supplies.
- Many water agencies have been expanding the use of recycled water within their service areas, which involve the significant capital investments for distribution infrastructure.
- The use of recycled water for irrigation limits the ability for an agency to reduce potable landscape irrigation



Agency with no recycled water for outdoor irrigation can obtain significant savings reductions from broad customer base to achieve conservation target.



Agency with recycled water has limited ability to gain significant savings reductions from broad customer base. Residential customers are disproportionately impacted to achieve the required reduction.

### Credit Calculation

To avoid disproportionately penalizing an agency's potable water customers when that agency has invested in and implemented recycled water programs, an equity adjustment is proposed. The adjustment calculation is as follows:

$$\text{Total Monthly Recycled Water Use} \times \text{Ratio of Monthly Recycled to Potable Use} \times \text{Conservation Standard}$$

The adjustment would be subtracted from the monthly production for the agency and the adjusted number reported.

### Example

	Agency A	Agency B
Total Water Use	125,000	125,000
Indoor Water Use – Potable	45,000	45,000
Outdoor Water Use –Potable	80,000	45,000
Outdoor Water Use –Recycled Water Use	0	35,000
<b>Conservation Standard -28%</b>	35,000	25,200
Indoor Reduction	2,250	2,250
Outdoor Reduction	32,750	22,950
<b>Percent Outdoor Reduction from Potable Water Customers Required Before an Adjustment is Applied</b>	<b>41%</b>	<b>51%</b>

The adjustment for Agency B would be:

$$35,000 \text{ AF} \times 35,000 \text{ AF} / 90,000 \text{ AF} \times 28\% = \mathbf{3,811}$$

	Agency A	Agency B
Outdoor Irrigation Demand Reduction Required Before Adjustment, AF	32,750	22,950
Recycled Water Adjustment, AF		3,811
Outdoor Irrigation Demand Reduction Required After Adjustment, AF		19,139
Potable Irrigation Demand, AF	80,000	45,000
Recycled Irrigation Demand, AF		35,000
<b>Percent Outdoor Reduction from Potable Water Customers Required After an Adjustment is Applied</b>	<b>41%</b>	<b>43%</b>

This adjustment will be applied at the discretion of the reporting agency.

**Alternative Path to Compliance: Water Conservation and Sustainable Supplies**  
**Proposed Modification to May 5, 2015 SWRCB Mandatory Water Conservation Regulation**  
**November 19, 2015**

***I. Basis and Rationale for Proposed Modification***

***Provides a Sustainable Approach to Managing California's Drought***

This modification provides California a more sustainable, balanced and diversified approach to reducing reliance on California's drought impacted supplies, such as the Bay-Delta. The State Water Resources Control Board's current emergency regulation focuses exclusively on extraordinary conservation as a means to manage California's severe drought. While extraordinary conservation is an excellent tool to achieve immediate savings, a more sustainable approach to managing droughts is through a combination of conservation and development of drought-resilient supplies.

***Protects California's Economy***

The imposition of demand reduction targets as the state's primary drought response places California at a competitive disadvantage in terms of business attraction and business expansion. Businesses are unlikely to relocate to, or expand their businesses in California under prolonged water use reduction mandates that ignore the availability of sustainable water supplies. These businesses and industries need to be convinced that the state is doing everything in its power to develop drought-resilient supplies to serve their businesses.

***Allows Urban Water Suppliers to Realize the Benefits from Sustainable Supply Investments***

This proposal allows water agencies to realize the benefits of their investments in sustainable water supplies – investments in self-reliance that are consistent with Governor Brown's Water Action Plan. The current emergency regulation takes a "one size fits all" approach to assigning the reduction level, without taking into account the sustainable supplies available to the urban water supplier. With the focus just on managing the drought through conservation, agencies are not allowed to benefit from investments in drought-resilient supplies. This proposal provides that benefit and also provides an incentive for agencies to develop sustainable supplies.

***II. Proposed Alternative Path to Compliance – Conservation and Sustainable Supplies***

The proposed alternative path to compliance method is a simple, straightforward approach where an urban water supplier may be allowed to achieve its reduction target through a combination of conservation and sustainable supplies. For example, an urban water supplier with a 100 acre-foot reduction target based on their assigned percent conservation standard would be allowed to meet its target through a combination of sustainable supplies (30 acre-feet) and conservation (70 acre-feet). Examples of sustainable supplies include potable reuse, desalination, long-term transfer of conserved water or other supply source not impacted by California's current drought. To ensure a balanced approach to managing the current drought, an agency's required conservation savings cannot drop below a certain threshold, which is currently proposed at 8% during the emergency period.

Because an urban supplier's conservation standard is not modified, the state's total reduction target is not affected and no other urban water supplier's conservation standard would be impacted. A wholesaler has the ability to assign its sustainable supplies to the urban water suppliers they serve. To utilize the alternative path to compliance, an urban agency must provide written proof that identifies the long-term availability of the supply.

# Emergency Conservation Regulations

## Groundwater Credits

### Why a Groundwater Credit?

- The response and vulnerability of groundwater supplies to drought is significantly different than surface water.
- Water providers made past investments in supplies as a buffer against shortages of surface water.
- Conservation targets may stifle investment and sustainable groundwater management.



basins and surface groundwater water. innovation in

### General Principles

- Adjustments must consider collective actions of water providers within a groundwater basin or multiple sub-basin.
- Groundwater extraction to offset the conservation target must be demonstrated to not have a negative impact on water quality or subsidence.
- Use of the supply must be through a formal action by the governing body of the water agency, which certifies that the project or program meets eligibility requirements and confirms the source, storage and method of delivery of the water.
- Groundwater supplies must be identified in an adopted Urban Water Management Plan or Water Resources Plan.
- Water supplies used from an eligible project or program during the period of the extended water conservation regulations would not be required to be reported as potable water production. Agencies would report total production and then separately the amount of potable water production that would be used to determine compliance with the required conservation reduction.

### Scenarios

- Groundwater Banking
- Conjunctive Use
- “Sustainable” Groundwater Management
- Adjudicated Basins

### Groundwater Bank Example

- Water providers that have stored water in a groundwater banking program with a quantified account.
- Any such water use must be consistent with the banking program.
- Any stored groundwater extracted under this program reduced from the stored water balance in the bank.

	Agency A	Agency B
Demand, AF	30,000	30,000
Banked Groundwater, AF		3,000
Reported Potable Water Production, AF	30,000	27,000

formalized storage “rules” of the must be

- The use of groundwater banking credits cannot involve variations to use of the agency’s existing water supply projects or programs.
- Groundwater banking credits cannot provide water on a regular basis to the retail water agency and must increase water supplies to the retail water agency in times of a declared water supply shortage or during emergency conditions.
- Groundwater banking credits must not negatively impact the supplies available to other water agencies during the shortage condition or emergency.

**Conjunctive Use Example**

- Water providers that have participated in a conjunctive to use surplus surface water to recharge groundwater through in-lieu use may demonstrate a quantity of storage as a result of these actions.
- Any such water use must be consistent with a locally groundwater management plan.

	Agency A	Agency B	
Demand, AF	30,000	30,000	use program directly or water in
Groundwater Use, Dry Year Average, AF	15,000	15,000	
Groundwater Use, Wet Year Average, AF	15,000	5,000	developed
Difference, AF	0	10,000	
Reported Potable Water Production, AF	0	20,000	basin that is groundwater

**“Sustainable” Groundwater Management**

- An agency that uses groundwater from a groundwater being managed sustainably under an adopted management plan may reduce its conservation target.
- A demonstration must be made that:
  - groundwater in storage was increasing prior to the beginning of the drought in 2012, and would be expected to increase during the next year of average or above precipitation and recharge, or;
  - groundwater extracted from a groundwater basin is less than the recharge during a year of average precipitation
- Groundwater extraction should be consistent with quantities allowed under the groundwater management plan.

# Emergency Regulation Regional Compliance Proposal

## Purpose:

To provide an option for regional compliance with Emergency Regulation conservation standards that will achieve the same amount of water savings as individual water agency conservation standards.

## Guiding Principles:

- Provide an opportunity for regions to work together to achieve water savings.
- Regional compliance is a voluntary approach. Water agencies would not be required to form a region nor participate in a regional alliance.
- Provide an additional compliance option to the Emergency Regulation.
- This proposal would support any other revisions to the Emergency Regulation. Additional revisions to the Emergency Regulation can and should be incorporated into the overall Regional Conservation Standard calculation.

## Regional Compliance Benefits:

Doesn't change individual agency conservation standards	Provides economies of scale for programs
Allows for consistent public messaging in the region	Improves flexibility for compliance
Allows agencies to leverage resources	Uses existing state law for regional formation
Allows for regional collaboration now and in the future	

## Regional Formation Criteria and Geographic Scope:

Allow regions to form based on the criteria for forming a SBx7-7 regional alliance, per Water Code Section 10608.28. Existing regional alliances, formed per Water Code Section 10608.28(a), would simply provide documentation to the State Water Board of their regional alliance and their intent to comply regionally. Additionally a region can form and submit letters of support to the State Water Board from each participating water agency for the purpose of regional compliance with the Emergency Regulation. Regions must be formed within two months of the effective Emergency Regulation date. Once a region is formed, it continues to exist until the end of the Emergency Regulation period.

## Regional Conservation Standard Calculation:

Each individual water agency would calculate their required water savings using their assigned individual conservation standard, weighted by June through February 2013 water production data. All individual water agency data would then be consolidated to calculate a Regional Conservation Standard.

## Group Leadership and Compliance Assessment:

- Regions would designate a lead agency to submit the Regional Conservation Standard and monthly progress on that standard to the State Water Board for acceptance.
- Each water agency would continue to report their individual monthly data to the State Water Board.

## Accountability and Enforcement:

- If the region meets the Regional Conservation Standard, each individual water agency in a region would be deemed successful at complying with the Regional Conservation Standard.
- If the region does not meet the Regional Conservation Standard, each individual water agency in a region would need to meet its individual conservation standard.
- If the region does not meet the Regional Conservation Standard and the individual water agency in the region does not meet its individual conservation standard, the individual water agency would be subject to enforcement action by the State Water Resources Control Board as outlined in the Emergency Regulation.