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Technical Fact Sheet Staff Proposal for Extended Emergency Regulation for Urban Water Conservation

Summary

Winter 2016 saw improved hydrologic conditions in parts of California. More rain and snow fell in Northern California as compared to Central and Southern California; yet, due to California's water conveyance systems, concerns over supply reliability have eased even in urban Southern California. Consequently, the mandatory demand-driven conservation standards in place over the last ten months should be adjusted. However, conservation standards are still needed in case this winter was a short reprieve in a longer drought.

Proposed changes to the drought emergency water conservation regulation would allow suppliers to define an individualized conservation standard based on their unique water supply and demand conditions. Each water supplier would be required to evaluate its supply portfolio and self-certify the accuracy of its information; the State Water Board would assign each supplier a mandatory conservation standard equal to the percentage deficiency the supplier identifies in its supply under certain specified assumptions. Additionally, certain statewide requirements on small suppliers and businesses would be lifted. The new conservation standards would take effect for June 2016 and remain in effect until the end of January 2017.

Background

In his April 1, 2015 Executive Order, Governor Brown mandated a 25 percent water use reduction by users of urban water supplies across California. In May 2015, the State Water Board adopted an emergency regulation requiring an immediate 25 percent reduction in overall potable urban water use. The May 2015 Emergency Regulation uses a sliding scale for setting conservation standards, so that communities that have already reduced their residential gallons per capita per day (R-GPCD) through past conservation have lower mandates than those that have not made such gains since the last major drought. Conservation tiers for urban water suppliers were set between eight percent and 36 percent, based on residential per capita water use for the months of July - September 2014.

On Feb. 2, 2016, based on Governor Brown's <u>November 2015 Executive Order</u>, the State Water Board approved an updated and extended emergency regulation that continued mandatory reductions through October. The <u>February 2016 Emergency Regulation</u> responded to calls for continuing the conservation structure that has spurred savings, while





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providing greater consideration of some localized factors that influence water needs around the state: climate differences, population growth and significant investments in new local, drought-resilient water supplies such as potable wastewater reuse and desalination. Under the proposed extended regulation, many water suppliers have somewhat lower water conservation standards, although statewide water conservation is expected to continue at high levels.

On May 9, 2016, Governor Brown issued a new <u>Executive Order</u> directing actions aimed at using water wisely, reducing water waste, and improving water use efficiency. The Executive Order, in part, directs the State Water Board to extend the emergency regulations for urban water conservation through the end of January 2017.

Proposed Emergency Regulation - Key Provisions

The <u>proposed Emergency Regulation</u> would replace the state-developed standards with locally-developed conservation standards based upon each agency's specific circumstances. The proposed regulation would require individual urban water suppliers to self-certify the level of available water supplies they have assuming three additional dry years, and the level of conservation necessary to assure adequate supply over that time. Suppliers that would face a shortage after a third dry year would be required to comply with a conservation standard equal to the amount of that shortage. Water supply reliability after the 2018-19 winter would be calculated as follows:

- The supply projection for the next three years would be based on current supply conditions plus an assumed three-year hydrology mirroring the 2012-13, 2013-14, and 2014-15 water years. (A water year runs from October 1 through September 30).
- Demand over that same period would be based on each supplier's average total potable water production for 2013 and 2014.
- Suppliers would factor into their calculations all of their water sources that are capable
 of being treated to potable standard during the three-year projected period.
- Supplier's conservation standards would be calculated as a percentage and rounded to the nearest whole percentage point.
- Suppliers would self-certify accuracy of their conclusions and provide their analysis
 and supporting data. The State Water Board would post information provided by
 suppliers on its website and assign each supplier, as a mandatory conservation
 standard, reductions equal to the supplier's projected percentage deficiency in supply
 at the end of the third dry year.
- Wholesale water suppliers would be required to make projections about how much water they would deliver to retail water suppliers under the three-dry-years scenario.

Suppliers that do not submit a water reliability certification and supporting information would retain their current conservation standard in almost all cases.

Questions and Answers about the Water Supply Reliability Self-Certifications:

Q: Is recycled water included as a source of supply?

A: Recycled water for purple pipe systems is not a potable supply and is not included in the baseline. Advanced-treated recycled water for indirect potable reuse (e.g.,

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groundwater augmentation or surface water augmentation) is included as a source of supply.

Q: Does a source of supply projected to come online in the next three years count? A: Yes. The source and the amount of water it would produce must be documented, and can be applied only after the projected start date of the new supply.

Q: Do the adjustments that took effect in March 2016 still apply?

A: No, the entire conservation May 2015 emergency regulation tier system, including the adjustments that took effect in March 2016, would be superseded for suppliers that use the new water supply reliability self-certification method. The prior conservation standards, including the credits/adjustments, would only continue to apply if a supplier does not participate in the new self-certification system. There is one exception - the reserved four percent conservation standard, which was based on certain areas of the state not experiencing drought conditions, would no longer apply, as the new structure addresses local supply conditions more directly.

Q: If a supplier provides untreated water to some of its customers, does that water count as a source of supply?

A: If that untreated water could be treated and used for potable drinking water purposes, then that water would count as a source of potential supply.

Q: Why is demand based on 2013 and 2014?

A: 2013 and 2014 had drought conditions and residents were asked to step up and conserve, but no mandatory conservation standards were in place. Demand is not expected to remain at 2015 levels in the absence of a 25% conservation mandate.

Q: Why is the new approach based upon hypothetical conditions in 2019?

A: Suppliers need to assess their water supply reserves for the possibility the drought continues for another three years. (This would not be unprecedented given the hydrologic record and Australia's recent drought experience). Conservation during the next nine months would leave more water in the ground and in reservoirs, creating a buffer against the possibility of a prolonged drought and the shortages some suppliers would face in that eventuality. Security for major urban centers requires planning beyond a single year, and using three more challenging years gives an appropriate measure of conservatism.



The table below shows two examples for how the new conservation standards would be calculated under the proposed regulation.

Example Calculations of Urban Water Supplier's Conservation Standard Supply Reliability for Three Additional Years of Drought			
Step 1: Determine Total Potable Water Demand (used in Step 3)			
Potable Water Production in Calendar Year 2013	40 thousand acre-feet		
Potable Water Production in Calendar Year 2014	30 thousand acre-feet		
Total Potable Water Demand	35 thousand acre-feet		
= ([40 thousand acre-feet] + [30 thousand acre-feet]) / 2	oo tilodaalid acic-leet		

Example Calculation 1: Sufficient Supply			
Step 2: Calculate Total Potable Water Supply			
Potable Water Supply	Year 1	Year 2	Year 3
Local Surface Water (thousand acre-feet)	10	9	8
Imported Water (thousand acre-feet)	9	8	8
Groundwater (thousand acre-feet)	15	17	20
Total Potable Water Supply (thousand acre-feet)	34	34	36
= [Local Surface Water] + [Imported Water] + [Groundwater]	34		
Step 3: Calculate Conservation Standard			
Total Potable Water Demand (from Step 1)	35	thousand a	cre-feet
Total Potable Water Supply in Year 3 (from Step 2)	36	thousand a	cre-feet
Supply Shortfall in Year 3 (negative amount indicates a surplus)			
= [35 thousand acre feet] - [36 thousand acre feet]	-1	thousand a	cre-feet
Conservation Standard with Self-Certification of Supply Reliability [Shortfall in Year 3] / [Total Potable Water Demand]*			0%

^{*} There is no shortfall in Year 3, the conservation standard is 0%.

Example Calculation 2: Insufficient Supply			
Step 2: Calculate Total Potable Water Supply			
Potable Water Supply	Year 1	Year 2	Year 3
Local Surface Water (thousand acre-feet)	10	9	8
Imported Water (thousand acre-feet)	10	9	8
Groundwater (thousand acre-feet)	20	18	16
Total Potable Water Supply (thousand acre-feet)	40	36	32
= [Local Surface Water] + [Imported Water] + [Groundwater]			
Step 3: Calculate Conservation Standard			
Total Potable Water Demand (from Step 1)	35	thousand a	cre-feet
Total Potable Water Supply in Year 3 (from Step 2)	32	thousand a	cre-feet
Supply Shortfall in Year 3 (negative amount indicates a surplus)			
= [35 thousand acre feet] - [32 thousand acre feet]	3	thousand a	cre-feet
Conservation Standard with Self-Certification of Supply Reliability		0.09	or 9%
[Shortfall in Year 3] / [Total Potable Water Demand] = [3] / [35 thousand acre fee	t]		



Most of the other existing regulation requirements remain unchanged, except as noted below. The proposed emergency regulation:

- Lifts the prior conservation requirements for small suppliers but maintains the current one-time report; however, it now occurs in December 2016 instead of this September. Small suppliers are encouraged to maintain conservation measures.
- Lifts the prior statewide requirements for commercial properties pertaining to drinking water and laundered towels and linens. Eating and drinking establishments and the hospitality industry are encouraged to maintain appropriate conservation measures.
- Requires self-supplied commercial, institutional, and industrial entities to target conservation at a level equal to the conservation standard required of the nearest urban water supplier.

End-User Requirements

Aside from the statewide requirements for commercial properties pertaining to drinking water and laundered towels and linens, the proposed Emergency Regulation maintains the current prohibitions on potable urban water use.

Continued prohibitions include:

- Irrigating with potable water of ornamental turf on public street medians;
- Irrigating with potable water outside of newly-constructed homes and buildings not in accordance with emergency regulations or other requirements established in the California Building Standards Code;
- Using potable water to wash sidewalks and driveways;
- Allowing runoff when irrigating with potable water;
- Using hoses with no shutoff nozzles to wash cars;
- Using potable water in decorative water features that do not recirculate the water; and
- Irrigating outdoors during and within 48 hours following measureable rainfall.

In addition, the regulation retains penalties for homeowners' associations or community service organizations that block, stifle, or threaten homeowners from reducing or eliminating the watering of vegetation or lawns during a declared drought emergency in violation of existing law.

Californians are urged to ensure existing trees remain healthy and do not present a public safety hazard. Trees and other non-turf vegetation within street medians may continue to be watered. Information on how to maintain trees while reducing outdoor water use is available at: www.saveourwater.com/trees.

Compliance Assessment

The State Water Board will continue to assess compliance with self-certified conservation standards, or with existing conservation standards for those suppliers that do not self-certify, using the suppliers' monthly reported data. Each month, State Water Board staff will reassess compliance based on the supplier's water savings. For suppliers that do not self-





certify, compliance will be measured on a cumulative basis; the supplier's conservation savings are added together from one month to the next and compared to the amount of water used during the same months in 2013. The State Water Board will continue to work with water suppliers along the way that are not meeting their targets to implement actions to get them back on track. The State Water Board will continue to use informational orders to request information from suppliers not meeting their conservation standards and, as appropriate, conservation orders that direct specific actions to correct non-compliance.

The alternative compliance process the State Water Board identified in Resolution No. 2015-0032 would remain available and current orders will be reviewed.

Prior Stakeholder Involvement

In addition to numerous meetings with stakeholders, the State Water Board conducted a public workshop on April 20, 2016, and used the input it received from that workshop and other available stakeholder input, along with insights gained since the February 2016 Emergency Regulation was adopted, to develop a proposed regulation adjusting the statewide conservation requirements. The State Water Board received input from more than 130 stakeholders - including water suppliers, local government, businesses, individuals, and non-governmental organizations.

What's Next?

The Board has set a formal comment period that will conclude just prior to the State Water Board's consideration of adoption of the proposed Emergency Regulation at its May 18, 2016, public meeting. During this formal notice period, all **comments must be received by 12 noon on Monday, May 16, 2016, and will not be accepted after that time. However, submitting comments by the close of business on Friday May 13 is recommended to provide the State Water Board Members more time to consider your input. Send submittals via e-mail to the Clerk to the State Water Board at commentletters@waterboards.ca.gov. Please indicate in the subject line, "May 18, 2016 BOARD MEETING (Conservation Extended Emergency Regulation)." All received comments will be provided to the Board Members and posted on the State Water Board's webpage. The Board will issue formal Notice of Proposed Rulemaking pursuant to the requirements of the Government Code on or about May 13.**

(This fact sheet was last updated May 9, 2016)