MEETING SUMMARY
Executive Order B-37-16
Listening Session -- Urban
June 6, 2016 | Los Angeles, CA

Department of Water Resources, State Water Resources Control Board, Department of Food and Agriculture, California Public Utilities Commission, and California Energy Commission

Prepared by the Center for Collaborative Policy

Table of Contents

Background 1
Meeting Objectives 1
A. Opening 2
B. Executive Order B-37-16 Overview 2
C. Executive Order Stakeholder Process 2
D. Use Water More Wisely 4
E. Eliminate Water Waste 7
F. Strengthen Local Drought Resilience 8
G. Closing Remarks and Next Steps 9
H. List of Appendices 9

Background
On May 9, 2016, Governor Edmund G. Brown Jr. issued Executive Order B-37-16 (EO). This EO builds on the conservation accomplished during the recent drought and implementation of the Governor's California Water Action Plan and temporary statewide emergency water restrictions to establish longer-term water conservation measures, including permanent monthly water use reporting, new permanent water use standards in California communities, and bans on clearly wasteful practices (e.g., hosing off sidewalks, driveways, and other hardscapes). The full text of the EO can be found online at http://www.water.ca.gov/wateruseefficiency/conservation/. The EO directives are further described in Appendix A - Executive Order Fact Sheet and List of Questions.

Department of Water Resources (DWR), the California State Water Resources Control Board (SWRCB), Department of Food and Agriculture (CDFA), California Public Utilities Commission (CPUC), and Energy Commission (CEC) (collectively, the EO State agencies) held four Public Listening Sessions regarding implementation of EO. This was the third Listening Session and was focused on urban directives of the EO.

The meeting included an overview of the EO, followed by a description of the proposed Stakeholder Groups and public involvement process to support EO implementation. The meeting then transitioned to an open comment period by the public. Participants were

encouraged to identify key topics and suggestions they would like the EO State agencies and soon-to-be-formed Stakeholder Groups to consider in the coming months during EO implementation.

Meeting Objectives

- Provide an overview from participating agencies on Governor's Executive Order B-37-16 (EO)
- Describe key projects and agency responsibilities
- Gather stakeholder input on key topics and implementation of the EO

A. Opening

Diana Brooks, DWR Water Use and Efficiency Branch Chief, opened the meeting and thanked everyone for attending. She explained that this is a multi-agency effort involving the EO State agencies listed above and that the effort will require all of us to work together.

Ms. Brooks described the context for the EO (refer to Appendix B for the presentation slides). California has been in a severe drought, with 2012-2015 being the four driest years on record. The State issued emergency regulations in 2015 that called for a 25 percent reduction in urban water use. Californians rose to meet the challenge, almost reaching the 25 percent statewide goal. She acknowledged water suppliers and congratulated them for their water reduction actions. The State issued rebate programs and other creative programs to help people change their behavior. The drought underscored a crucial lesson – we cannot take water for granted. Ms. Brooks stated that we need to plan for future droughts that will be more frequent and persistent. The purpose of this EO is to make permanent changes that will make conservation a way of life in California.

B. Executive Order B-37-16 Overview

Ms. Brooks provided an overview of the EO directives, deliverables, timeline, and public input process (Appendix B). The following provides a brief summary of this overview.

Ms. Brooks introduced and described the EO's four main sections:

1. Use Water More Wisely
2. Eliminate Water Waste
3. Strengthen Local Drought Resilience
4. Improve Agricultural Water Use Efficiency and Drought Planning

The EO State agencies must develop a public report and issue it by January 10, 2017. The report will address the four topics listed above and will include recommendations for a draft long-term water use efficiency framework, a framework for new water use targets, updated requirements for Water Shortage Contingency Plans (WSCP), and draft updated requirements for Agricultural Water Management Plans (AWMP).

C. Executive Order Stakeholder Process

Ms. Brooks explained that the EO puts a strong emphasis on the public stakeholder process. Stakeholders named in the EO include urban and agricultural water suppliers, local governments, agricultural producers, environmental groups, and others.

These listening sessions are the first steps in the public input process. The EO State agencies are reaching out to get stakeholders' ideas and input. The EO Fact Sheet handout (Appendix A) includes list of questions to initiate public comment and input on its implementation.

After these listening sessions, Urban and Agricultural Stakeholder Advisory Groups (UAG and AAG, respectively) will be formed to advise the EO State agencies. The UAG will differ from the stakeholder committee formed for SB X7-7; the UAG will focus specifically on this EO. In putting together the committees, the EO State agencies will seek representation from a diversity of water suppliers (e.g., large, small, wholesale, retail, urban, and rural), disadvantaged communities, environmental groups, and others. Criteria are being developed and the rosters will be named within the next month.

Stakeholder advisory group meetings will be held monthly and open to the public with time for public comment. Ms. Brooks emphasized these meetings support a transparent and inclusive process so that everyone can contribute. The decisions will be made by the EO State agencies from proposals supported by the public stakeholder engagement process. The EO State agencies look forward to public input and collaboration. Ms. Brooks noted they have a tight time frame to draft the report by mid-October and complete the published report by January 10, 2017.

Comments and Questions on the Public/Stakeholder Process

Stephanie Lucero, Center for Collaborative Policy Facilitator, reviewed the meeting agenda and referred attendees to the handouts. The EO Fact Sheet handout (Appendix A) provides an overview of the EO and questions provided to initiate public comment and input on implementation of the EO. She emphasized that the primary purpose of the meeting was for the EO State agencies to hear stakeholders' input and suggestions on EO implementation.

The following questions and comments were made regarding the stakeholder process:

- What will be the size of UAG?
    - *Response*: The specific size of the group has not yet been decided, but it would probably have about 20-35 members. We invite any suggestions on group size.
- Seven would likely be too small; the size of the previous SB X7-7 group (25-30 individuals) worked well.
- The UAG should include knowledgeable people who understand water supply, have experience in managing water supply, and understand how to engage customers and how customers respond.
- The selection of a broad spectrum of representatives on the UAG is a good engagement approach.
- Include retailers on the UAG because they are most affected.

- Given the short timeline, focus on robust communication, including frequent meetings.
- The results of this process can seriously impact rate payers, we must ensure the outcomes are feasible and implementable.
- The UAG should include representatives of the California Association of Sanitation Agencies and its water reuse efforts.
- Given that commercial/institutional/industrial (CII) customers are mentioned in the EO, include CII representatives in the stakeholder process. Perhaps the Chamber of Commerce could participate on behalf of CII users.
- There are two different kinds of disadvantaged communities to consider for the UAG: the rural communities (that are disadvantaged based on the definition of earning 80 percent of median household income) and the urban communities (that do not meet this criteria and that have access to water but affordability is still an issue).
- Will agencies ask people to participate or can people volunteer?
    - *Response*: Yes to both questions.

D. Use Water More Wisely

Peter Brostrom, DWR Water Use and Efficiency Branch Section Chief, reviewed how previous droughts have led to policy changes. He noted that many people feel the 25 percent across the board conservation target, that was implemented in response to the current drought, is unfair and that targets should consider local conditions.

The Use Water More Wisely section of the EO directs SWRCB to develop a new regulatory framework to address the current and potential future droughts, directs DWR to develop new water use targets, and makes monthly use reporting a permanent requirement. The new water use targets will be based on standards for indoor residential use, outdoor irrigation, CII use, and water system distribution loss. The EO State agencies would like the public's input on how to use those four standards to set targets going forward.

Mr. Brostrom explained that the EO State agencies do not expect to have everything perfected in the January 10, 2017 report. The EO State agencies anticipate developing a framework to help guide legislation; details for the standards can be revised and updated in the future as needed.

One important issue in developing these standards is the knowledge about landscape area for different water suppliers. The State will provide assistance to further landscape measurement in the future.

Three questions are included in the handout to initiate this discussion, but all comments are welcome:

1. What factors should be considered in developing the new standard-based water use targets and customizing them for each urban water supplier?
2. How should the four standards listed in the EO be used to identify and determine those new water use targets and how urban water suppliers would implement them?
3. How should existing SB X7-7 20x2020 targets be considered in determining new targets?

Comments and Questions

The following questions and comments were made regarding the Use Water More Wisely section of the EO:

Baseline/Past Efficiency Measures

- The State needs to examine historic conservation that has already been achieved (as SB X7-7 did); high water use efficiency in certain areas must be considered. Saturated markets (e.g., toilet rebates) should also be acknowledged.
- SB X7-7 needs to be the starting point to inform this process.
- Baselines need to cover a long period of time, such as the SB X7-7 ten-year baseline. Look at trends over more than one year due to influences such as the economy and climate.

Landscape Measurement and Water Budgets

- Ground truth and conduct a pilot test for landscape measurements to fully vet this option before investing significant State funding.
- The State should assist local agencies obtain irrigated area measurements. Processes to obtain these measurements must be established first in order for agencies to meet water use efficiency goals within the desired timeline.
- Landscape information is a good tool to set the standards, but it is only one part of the tool. The Los Angeles Department of Water and Power (LADWP) is looking at this for one percent of its customers; it is not appropriate for all 7,000 users. Many of its customers are saturated. For these customers, landscape budgets might work to verify if they are being efficient but will not result in further conservation.
    - *Response:* This discussion of landscape measurements does not assume that suppliers would have to use budget-based rates. The EO State agencies are examining water suppliers' service areas to inform setting targets; the State is not trying to recommend one rate approach over another.
- Some water suppliers cannot feasibly establish water budgets. For some, there will not be savings if they convert to a water budget-based program.

Efficiency Standards/Targets

- Do not have different standards for the four sectors. Although water efficiency information may be developed for the four sectors, there should be one long-term target for the entire area.
- It will be difficult to set water use standards for the CII sector because there is so much variation within the sector.
- If the EO State agencies are committed to the four sectors, they need to consider the fact that not all will deliver the same result in different locations.
- Although standards need to be measurable and have an outcome, consider other actions, such as outreach and education, to change lifestyles. There are methods available to approximate what these can yield.

- While looking at frameworks for efficiency, consider broader State and possibly national policies that can be complementary and synergistic.
- The overall framework should focus on efficiency at an agency-wide or individual customer level.
- Explore opportunities for significant savings in the CII sector that individual water utilities may not be able to get on their own (e.g., a cooling system that may result in savings but would have long payback period). Many water utilities may not be able to offer a rebate. The State could help with larger dollar rebate programs for large saving opportunities when local agencies do not have the funds.
- Explore watershed-wide improvements (outside of best management practice-type improvements) that could offer longer-term ways to use water more wisely.
- Focus on water supply reliability by providing support and incentives (e.g., credits for past and future investments in recycled water, desalination, and storage facilities).

<u>Local/Supplier Flexibility</u>

- Allow flexibility and provide multiple and/or custom options in setting standards. Look at local factors such as climate, density, and growth. Feasibility may also vary locally.
- Keep in mind that there is a broad range of agencies with a broad range of data availability. Solutions need to have multiple options based on available data.
- Customization is laudable but would be too complex due to too many factors to consider. Try to find an approach that preserves local flexibility with the State as an arbiter of local plans' adequacy and sustainability. Local plans can be required to address the four efficiency elements of the EO.
- Recognize that some water supplies are more sustainable than others. Allow agencies to pick the right combination of supply sources that suits their local area as a more cost-effective approach (e.g., agencies may be early adopters of the new water standards).

<u>Economic Aspects</u>

- The selected method must not cause hardship or result in inefficient resource needs.
- Do not hinder economic development for areas that are still recovering.
- Cost-effectiveness measures are very important. Agencies should receive credit for previous investments.
- Many communities invested substantial funds and resources into reuse/recycling. It will be difficult to ask ratepayers to pay for conservation on top of reuse.
- It would be helpful for small water suppliers to include a cost-benefit analysis of conservation programs in the report.
- Landscapers' clients do not want to invest in water-saving products (e.g., drip irrigation) when the rate of return on their investment is not readily quantifiable. It will be easier to promote these products if the EO State agencies can help demonstrate these savings.
- Put funding control in local hands for items such as turf removal rebates.
    - *Response:* The funds mentioned earlier were for landscape area measurements; there is a separate program for landscape conversion.

Data Collection/Reporting Requirements

- Monthly reporting of data is valuable to identify what works. However, many different reports exist that need to be filed with many different State agencies. Streamline the process so that all the information goes to one place, and water agencies do not have to submit different data to different places.
- Urban Water Management Plans (UWMP) are an appropriate reporting tool.

Wastewater

- Where gallons per capita per day (GPCD) is already low, lowering it further will have impacts on moving wastewater.
- Consider new State policy to divert organic waste into wastewater systems. Agencies will need to move more solids with less water.

E. Eliminate Water Waste

Erik Ekdahl, SWRCB Office of Research, Planning, and Performance Director, described the four directives in this section of the EO. He noted that the first directive, to permanently prohibit certain practices that waste potable water, will be implemented through a public process, requring the California Environmental Quality Act (CEQA) process, hearings, workshops, etc. The other directives are to minimize system leaks, accelerate data collection, improve system management, and prioritize capital projects that reduce water waste. The CEC and CPUC also have EO roles in eliminating water waste.

Mr. Ekdahl read the questions included in the handout to initiate this discussion:

1. What actions should the State and/or urban water suppliers take to accelerate leak detection and repair?
2. How can the EO State agencies contribute or support local efforts to identify leaks and reduce related potable water loss through leaks?
3. What key data should urban water suppliers be responsible to develop, and what data should the State provide?

Comments and Questions

- UWMP and SB 555 already require submittal of data (including water loss balances), which will undergo third-party validation. Review these requirements before asking for more data.
- Use water audit results that agencies are developing this year and next.
- SB 1420 and 555 are just being put into effect. Water balances are an iterative process; the first year's balance will not offer an actionable result. Allow SB 1420 and 555 to play out for a few years to obtain good water balances.
- A one-size-fits-all solution does not exist for water loss control. Water suppliers need to evaluate their own system to find the best solutions.
- Water loss is expensive – the agencies have self-motivation to figure out how to reduce water loss, particularly in southern California.

- The EO State agencies must provide support (e.g., technical assistance for leak detection and repair and funding). Existing technical assistance helps, but more is necessary (e.g., additional workshops, training).
- Consider starting with a water loss standard, then work backwards to determine how long it will take to achieve the goals and what types of investments are needed; then set interim targets. This will incorporate local conditions and allow local suppliers to determine how they want to achieve the goals.
- The State should exercise caution when prioritizing capital improvements. The EO State agencies need to consider local Capital Improvement Plans. Local agencies cannot implement everything at once.
- Exercise caution when using long-term percentages as they can be deceiving. For example, they can actually go down despite greater water use.
- Use other metrics in addition to long-term percentages.
- Review how Georgia approached these issues.
- Conduct an economic analysis of real loss intervention strategies (e.g., pressure management, infrastructure repair, reduction of leak response and repair times, and active leak detection).
- Consider targeting agencies that have large water losses, because water losses become less of a priority as these losses decrease. Recognize the agencies that already have small losses.

F. Strengthen Local Drought Resilience

Kent Frame, DWR Water Use and Efficiency Branch Program Manager, described this section of the EO and noted the importance of communication in accomplishing these goals.

In consultation with urban water suppliers, local governments, environmental groups, and other partners, DWR is required to strengthen standards for local WSCPs, which are part of the UWMPs that water districts must submit every five years. Under new strengthened standards, districts must plan for droughts lasting at least five years, as well as more frequent and severe periods of drought. These plans must be actionable, so that districts can turn to them to guide their drought response.

Mr. Frame read the questions included in the handout to initiate this discussion:

1. After five years of drought conditions, how can WSCP requirements be improved and strengthened to make the plans a more effective tool for urban water suppliers to respond to future droughts?
2. Which elements of a WSCP requirements are conducive for developing uniform statewide standards, and which requirements should be more flexible to account for local conditions?
3. How can small supplier and rural community drought planning be improved and strengthened?

Comments and Questions

- Allow water suppliers to decide when it is appropriate to implement contingency plans.
- WSCP recommendations should be consistent moving forward. Changes present difficulties such as messaging with customers.
- Allow for flexibility; allow local methods to balance both supply and demand.
- Many agencies have changed their contingency plans in their 2015 UWMPs. That might be a good starting point.
- How were the requirements developed? What is the rationale for the five-year requirement?
- Do not establish artificial hydrological conditions. Different patterns in the State exist for different regions.
- Is this process going to need CEQA; is it a rule making process?
- WSCPs should use a progressive approach based on local supply conditions. They should reflect supply availability on a local level.
- Address agricultural use as a chapter in the UWMP rather than requiring a separate AWMP.
    - *Response:* The EO includes a threshold for requiring an AWMP.
- Look at and use data that were submitted to the SWRCB during this drought.
- If all retailers and wholesalers in an area agree, allow them to develop one WSCP. Allow a regional approach for implementing the EO.
- Reuse/recycling has the potential to help meet resilience goals.
- The proposed framework should encourage the development of sustainable supplies as part of the overall solution.

G. Closing Remarks and Next Steps

Ms. Lucero noted that future comments can be sent to the water use efficiency email address on the last page of the EO Fact Sheet handout - WUE@water.ca.gov. The link for the listening sessions held on Friday June 3rd and the summary reports from these sessions will be posted on the website: http://www.water.ca.gov/wateruseefficiency/conservation/. (Refer to Appendix C for written comments submitted at the meeting.)

Attendees were thanked for participating in the listening session. The Metropolitan Water District was also thanked for hosting this event.

H. List of Appendices

- Appendix A – Executive Order Fact Sheet
- Appendix B – Presentation Slides
- Appendix C – Written Comments Submitted at the Meeting
- Appendix D – Sign-in Sheet

Making Water Conservation a California Way of Life

On May 9, 2016, Governor Edmund G. Brown Jr. issued Executive Order B-37-16. The press release stated, "Moving to bolster California's climate and drought resilience, Governor Edmund G. Brown Jr. today issued an executive order that builds on temporary statewide emergency water restrictions to establish longer-term water conservation measures, including permanent monthly water use reporting, new permanent water use standards in California communities and bans on clearly wasteful practices such as hosing off sidewalks, driveways, and other hardscapes."

This Executive Order (EO) builds on the conservation accomplished during the drought and implementation of the Governor's California Water Action Plan. The full text of the EO can be found online on the Department of Water Resources (DWR) website at http://www.water.ca.gov/wateruseefficiency/conservation/. The directives of the EO actions are summarized below.

Included with each section of this information sheet are questions to help focus and guide the discussion during the listening sessions. Please read and consider these questions as well as other input in preparation for the listening sessions.

Use Water More Wisely

DWR and the State Water Resources Control Board (Water Board) will require monthly reporting by urban water suppliers on a permanent basis. This includes information regarding water use, conservation and enforcement. Through a public process and working with partners such as urban water suppliers, local governments, and environmental groups, DWR and the Water Board will develop new water use efficiency targets as part of a long-term conservation framework for urban water agencies. These targets go beyond the 20 percent reduction in per capita urban water use by 2020 that was embodied in SB X7-7 of 2009, and will be customized to fit the unique conditions of each urban water supplier.

Deliverables: DWR and the Water Board will publicly release a draft long-term conservation framework by January 10, 2017. This framework will include new water use targets based on strengthened standards for indoor residential water use, outdoor irrigation, CII water use, and distribution system water loss. The EO requires that these new targets are customized for each urban water supplier.

Questions for Listening Sessions

1. What factors should be considered in developing the new standard based water use targets and customizing them for each urban water supplier?
2. How should the four standards listed in the EO be used to identify and determine those new water use targets and how urban water suppliers would implement them?
3. How should existing SBX 2020 targets, be considered in determining new targets?

Eliminate Water Waste

The EO directs the Water Board to prohibit a number of practices that waste potable water, and directs the Water Board and DWR to minimize system leaks, accelerate data collection, improve system management, and prioritize capital projects that reduce water waste. The California Energy Commission (CEC) and California Public Utilities Commission (CPUC) also have EO roles in eliminating water waste.

Deliverables: The Water Board and DWR will take actions to minimize water system leaks across the state that continue to waste large amounts of water. The CPUC will take actions to minimize leaks, and CEC will certify innovative water conservation and water loss detection technologies.

Questions for Listening Sessions

4. What actions should the State and/or urban water suppliers take to accelerate leak detection and repair?
5. How can the State Agencies contribute or support local efforts to identify leaks and reduce related potable water loss through leaks?
6. What key data should urban water suppliers be responsible to develop, and what data should the State provide?

Strengthen Local Drought Resilience

In consultation with urban water suppliers, local governments, environmental groups, and other partners, DWR will strengthen standards for local Water Shortage Contingency Plans, which are part of the Urban Water Management Plans that water districts must submit every five years. Under new strengthened standards, districts must plan for droughts lasting at least five years, as well as more frequent and severe periods of drought. These plans must be actionable, so that districts can turn to them to guide their drought response.

Deliverables: DWR shall publicly release the updated draft requirements by January 10, 2017. For areas not covered by the Water Shortage Contingency Plan, DWR will work with counties to improve drought planning for small water suppliers and rural communities.

Questions for Listening Sessions

7. After five years of drought conditions, how can water shortage contingency plans requirements be improved and strengthened to make the plans a more effective tool for urban water suppliers to respond to future droughts?
8. Which elements of a water shortage contingency plan requirements are conducive for developing uniform statewide standards, and which requirements should be more flexible to account for local conditions?
9. How can small supplier and rural community drought planning be improved and strengthened?

Improve Agricultural Water Use Efficiency and Drought Planning

DWR, working with the California Department of Food and Agriculture (CDFA), will update existing requirements for Agricultural Water Management Plans so that irrigation districts quantify their customers' water use efficiency and plan for water supply shortages.

Current law requires agricultural water districts serving 25,000 acres or more to file such plans. The EO increases the number of irrigation districts who must file water management plans by lowering the threshold to irrigation districts serving 10,000 acres or more. DWR will check the plans to ensure they quantify conservation efforts and adequately plan for water shortages.

EXECUTIVE ORDER B-37-16

MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

EXECUTIVE ORDER B-37-16

- Use Water More Wisely
- Eliminate Water Waste
- Strengthen Local Drought Resilience
- Improve Agricultural Water Use Efficiency and Drought Planning

USE WATER MORE WISELY

- New water use targets
- Targets to go beyond 20% reduction in per capita urban water use (SB X7-7 of 2009)
- Customized to fit unique conditions of each water suppliers
- Generate more statewide water conservation than existing requirements

ELIMINATE WATER WASTE

- Water Board to permanently prohibit wasteful practices
- DWR and Water Board shall direct actions to minimize water system leaks
- CPUC to order IOUs to accelerate work to minimize leaks
- CEC to certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency

STRENGTHEN LOCAL DROUGHT RESILIENCE

- Strengthen requirements for Water Shortage Contingency Plans (WSCPs)
  - Respond to droughts lasting at least five years
  - Create common statewide standards so these plans can be quickly utilized in this and future droughts.
- Improved drought planning for small water suppliers and rural communities

IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING

- Update existing AWMP requirements.
  - Identify and quantify measures to increase water efficiency
  - Adequately plan for water shortages
  - Extend AWMP requirements to all agricultural water suppliers with over 10,000 irrigated acres of land

EO DELIVERABLES & TIMELINES

- Public Report issued January 10, 2017
- Report to include:
  - Draft Long Term Water Use Efficiency Framework
    - Proposed draft water use targets
    - Draft updated requirements for Water Shortage Contingency Plans
    - Draft updated requirements for Agricultural Water Management Plans
  - Status update on other EO directives

EXECUTIVE ORDER STAKEHOLDER PROCESS

- EO B-37-16 places a strong emphasis on stakeholder involvement
- Stakeholders include urban and agricultural water suppliers, local governments, agricultural producers, environmental groups, and others.
- New EO stakeholder committees
  - Urban Stakeholder Committee
  - Agricultural Stakeholder Committee

EXECUTIVE ORDER B-37-16 LISTENING SESSIONS

- Send additional thoughts and comments to wue@water.ca.gov
- Check EO website for updated information at www.water.ca.gov/wateruseefficiency/conservation/

Deliverables: The Water Board and DWR will work with water suppliers to accelerate data collection, improve water system management, and prioritize capital projects to reduce water waste. DWR and CDFA will seek public input on the updated standards, and release a public draft of proposed changes by January 10, 2017.

Questions for Listening Sessions

10. How could the Agricultural Water Management Planning requirements (AWMPs) better identify local measures and practices to improve water use efficiency?
11. How could the AWMP better quantify improvements in water use efficiency?
12. The Sustainable Groundwater Management Act requires local Groundwater Sustainable Agencies to complete a water balance for the groundwater basin. Should water balances be part of AWMPs?
13. Are there ways the AWMP reporting requirements can be streamlined with other reporting requirements including SGMA and the Irrigated Lands Program?

Compliance Methods

To ensure compliance with the provisions of the EO, DWR, Water Board, and CPUC will work together to develop methods which could include technical and financial assistance, regulatory oversight and enforcement mechanisms.

Stakeholder Engagement Process and Schedule

DWR, Water Board, CDFA, CPUC, and CEC as members of a State Agency Team are working together to carry out the EO and will convene venues to engage stakeholders in the process including urban water suppliers, agricultural water suppliers, environmental organizations, local governments, tribes, and other partners. The State Agency Team is convening public Listening Session on June 3, 6, and 7, 2016 to describe the Executive Order and receive initial public comments on its implementation.

The State Agency Team will engage stakeholders to inform the development of the deliverables listed above. The stakeholder engagement process and schedule are being developed and will be posted online at: http://www.water.ca.gov/wateruseefficiency/conservation/

The questions listed above focus on specific EO actions for which the State Agencies are seeking feedback; comments or input on items not specified may be discussed at the Listening Sessions or submitted to: WUE@water.ca.gov .

American Water Works Association
California-Nevada Section

"Making Water Conservation a California Way of Life"

DWR and SWRCB Listening Session

June 6, 2016

Comments of Dr. Tim Worley, Executive Director
California-Nevada Section, American Water Works Association

Introduction

The California-Nevada Section of the American Water Works Association represents over 5,000 members in California, consisting of water professionals from public and private utilities of all sizes and in many occupational fields, as well as many companies that provide a wide array of products and services on which water agencies depend. Timing of this session did not permit us to obtain any systematic input from our members, so these comments may not represent the views of all of our members. These comments come from my own 20+ years of experience.

Comments: "Use Water More Wisely" (apply to Questions 1 and 2)

1. ***Customization is a laudable idea, but individual targets are impossible to get "right;" thus, stick to a simple test of urban agencies' own representations of past actions and future reliability.***

"One size does not fit all" when considering standards of acceptable water use across the whole spectrum of urban water suppliers, which guarantees that most agencies are going to find fault with whatever is adopted. Every situation will have something unique about it, and an attempt to account for every possible variable, and every permutation of those variables, would find the State going down a rabbit hole. Think of the variables that arguably could be considered (and have been raised) in setting individualized targets:

- Diversity of water supplies, seniority of water rights, and the security and historic reliability of those sources of supply;
- Quantities or water held in storage, and/or available from storage or transfer agreements;
- Likelihood of successfully exercising storage or other agreements and conveyance of the wet water;
- Opportunities for regional cooperation to mitigate shortages;

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- Population, along with the economic and demographic composition of the customer base;
- Economic composition of the utility's service area, and the dependence on water for vital economic sectors such as agriculture, outdoor recreation/tourism, technology, and so on;
- Climate zones of the agency service area, or corresponding evapotranspiration rates and amount of landscaped area;
- Past investment in water conservation, and resulting demand hardening;
- And finally, after all of that, would you get to individual measurements of indoor residential water use, outdoor irrigation, CII water use, and distribution system water loss.

The point of going through this list—which is almost certainly not exhaustive—is just to drive home how quickly the task of customizing every urban water supplier's water efficiency target becomes unmanageable. Even if Google were to create the model, it would have too many variables in a black box and probably would not "feel" true or fair.

2. ***Local flexibility should be preserved, and the State role should be as an arbiter of the adequacy and sustainability of local or regional plans.***

If a standard has to be applied to each urban water agency, it should essentially be a reliability test of each agency's Urban Water Management Plan. The test could be based on the reliability of 3-year drought supplies and efficiency measures to meet demands, and the certainty of contingency actions in the event planned steps fall short. Local plans could be required to detail how the four efficiency elements will be addressed, and the metrics to be attained in each area. Plans, which would be made available for public inspection, could be compared against achievements during the mandatory reduction period and categorized as reasonable or unreasonable. Instead of following the Pareto principle and adopting new rules for everyone as a result of the failures of a minority, the State's resources should primarily be directed toward those local areas that had the most difficulty meeting the recent mandatory reductions, and especially those areas that literally ran out of water.

Comments: "Eliminate Water Waste" (apply to Questions 4-6)

4. ***What actions should the State and/or urban water suppliers take to accelerate leak detection and repair?***

First, the State is already taking very appropriate steps in this area, as DWR takes steps to implement SB 555, and the State Water Board approved funding for the Water Loss Technical Assistance Program that just last week opened up to registration for all urban water agencies in California. The Water Loss TAP helps systems locate the sources of data to complete

distribution system water audits with known volumes; apply a grade to that data which meets expert data validation requirements of SB 555; and from that, utilities can appropriately value system losses—thereby using good, system specific data to drive supply side water loss and leak detection activities.

From the 2016 audits submitted with 2015 Urban Water Management Plans, and 2017 validated audits a collection of performance indicators and system practices can be developed, following the SB 555 timeline. This is a long term effort, beginning with Phase 1 which is just initiated. I strongly suggest continued support by both state agencies for our Water Loss Control Collaborative, and to include Water Loss TAP leaders on the stakeholder committee and sub-workgroup.

Those are important general steps, but there is also a more technical answer to the question. A leak detection effort, to be successful and cost effective, requires the utility to have two things: 1) a detailed understanding of their real loss volume, and 2) the composition of the real losses. The volume of real losses is obtained from a validated water audit, while a component analysis will show how much of their real losses are recoverable through leak detection.

So in order to get there the water balance needs to be in place and have a relatively high level of confidence in the calculated real losses volume.

In many cases this means that the utility should have random meter test data available to confirm their apparent loss volume which in return influences the calculation of their real loss volume. For example working with 18 MWDOC utilities a very common picture emerges - in all cases the meter under-registration had to be estimated since no random meter test data is available. Thus, the current understanding of their real loss volume could be significantly off depending on how accurate their customer meters are.

For these leak detection efforts to make sense across the state we would suggest the following steps:

1. Make use of the Water Loss TAP water audit results (2017)
2. Identify utilities with high leakage potential (from validated water balance)
3. Provide technical assistance/funding to do real and apparent loss component analysis to develop cost effective leak management strategy
4. Provide technical assistance/funding for sustainable leak detection/repair – including canvassing surveys, DMAs and pressure management – once a utility has taken (and documented) steps 2 & 3

5. ***How can the State Agencies contribute or support local efforts to identify leaks and reduce related potable water loss through leaks?***

First, by providing technical assistance and funding for steps 3 and 4 described above. Second, the State Agencies should reinforce the importance of following the sequence discussed above:

- start with validated water audit
- real and apparent loss component analysis
- develop cost effective leak management (intervention) strategy
- implement
- use annual validated water audit to assess and refine

6. ***What key data should urban water suppliers be responsible to develop, and provide to the State?***

Focusing just on the matter of distribution system efficiency, the State should require these four related pieces of information:

- validated AWWA audit
- component analysis of real and apparent losses
- cost effective intervention strategy
- documented implementation efforts – i.e. practices employed

Appendix D – Sign-in Sheet

Executive Order B-37-16

Listening Session – Urban

June 6, 2016 | Los Angeles, CA

NAME	AFFILIATION
Lesley Dobalion	San Diego Water Authority
Cathy Pieroni	City of San Diego
Sergio Fienni	Southern Region
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Lana Haddad	Long Beach WD
David Sumi	MWD
Grace Woo	MWD
Justin Skarb	Cal Water
Kevin Wattier	Central Basin
Nicholas Schneider	MWA
Travis Brooks	Signal Hill
Campbell Scott	Council for Watershed Health
Amy Hoang	CWH
Kaiyi Wong	CWH
Sofia Marcus	LADWP
Penny Falcon	LADWP
Michele McKinney	WMWD
Carolyn Schaffer	MWD
Gabriel Gomez	City of Pico Rivera
Adrian Rodriguez	City of Pico Rivera
Stacie Takeguchi	Metropolitan Water District
Miluska Propeusi	Metropolitan Water District
John Kemmerer	US EPA
C Carson	Aleshire and Wynder
Tim Worley	CA-NV AWWA
Tracy Quinn	NRDC
Shiadha Upadhayay	MWD
Ethel Young	MWD
Dean Wang	Long Beach WD
Jill Teraoka	MWD
Grace Chen	MWDSC
Vicki Lake	DWR
Anita Matiod	Rainbird
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Caroline Mccormack	California Housing Partnership

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Al Shaikh	City of Anaheim
Nate Adams	SMWD
Malissa Tem	YLWD
Tom Russell	J.H.O Brian Landscape
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Deborah O Brian	J.H.O Brian Landscape
Joe Berg	MWDOC
Ian Prichard	Camusa Water District
Diana Brooks	DWR
Kent Frame	DWR