New Guidelines for UWMPs and WSCPs

Update on Executive Order B-37-16

MAKING CONSERVATION A CALIFORNIA WAY OF LIFE

NWRI MEETING OCTOBER 2016,

KENT FRAME, DWR/DSIWM/WU&E BRANCH

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Presentation Overview

- Overview of Executive Order B-37-16
- Implementation and Agency Actions
- Timeline and Next Steps

EO B-37-16 Overview

Issued May 9th, 2016

Four key components, with 13 directives.

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

EO Overview: Use Water More Wisely

- EO Directives #1 through #3:
  - Adjust emergency conservation regulations, develop proposal to achieve a mandatory reduction that builds off 25% previous conservation targets
  - Set water use targets by establishing statewide standards for indoor water use, outdoor water use, water loss, and CII (commercial, industrial, and institutional)
  - Permanently require monthly reporting from suppliers on water use, conservation, and enforcement

EO Overview: Eliminate Water Waste

- EO Directives #4 through #7:
  - Permanently prohibit practices that waste water
  - Minimize system leaks
  - Accelerate data collection, improve management, and prioritize capital projects to reduce water waste
  - Certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency

EO Overview: Strengthen Local Drought Resilience

- EO Directives #8 through #10:
  - DWR to strengthen requirements for urban water shortage contingency plans (WSCPs), creating common standards and planning for at least five years of drought.
  - For areas not covered by a WSCP, DWR shall work with counties to facilitate improved drought planning for small water suppliers and rural communities.

EO Overview: Improve Ag Water Use Efficiency and Drought Planning

- EO Directives #11 through 13:
  - DWR and CDFA update existing requirements for Agricultural Water Management Plans
  - DWR to permanently require completion of Agricultural Water Management Plans by water suppliers with over 10,000 irrigated acres of land

EO Overview: Additional Elements

- EO also includes requirement that:
  - DWR, Water Board, and CPUC shall develop methods to ensure compliance with the provisions of the Order, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers.

Agency Implementation

ACTIONS THE EO AGENCIES WILL TAKE TO IMPLEMENT THE EXECUTIVE ORDER

Implementation: Use Water More Wisely

EMERGENCY REGULATIONS

WATER USE TARGETS AND STANDARDS

REPORTING REQUIREMENTS

Implementation: Use Water More Wisely

- Modified emergency drought regulations (EO #1)
- Board will develop proposal to achieve mandatory reduction to build off 25% (EO #1)
- Board and DWR to make monthly reporting permanent (EO #3)

Implementation: Use Water More Wisely

- State agencies to establish a long term framework for new water use targets based on water budgets calculated from standards for 4 sectors (EO #2)
  - Indoor residential
  - Outdoor irrigation
  - Commercial, Industrial, Institutional (CII)
  - Distribution System Loss

Implementation: Efficiency Standards

- **Indoor Standard:**
  - Provisional standard of 55 GPCD
  - Revise downward in 2018, based on additional studies, to be achieved by 2025.
- **Outdoor Standard:**
  - Provisional standards based on Model Water Efficient Landscape Ordinance:
    - 0.8 reference Evapotranspiration (Et) (pre-2010)
    - 0.7 reference Et (2010-2015)
    - 0.55 (residential) or 0.45 (commercial) post 2015
    - 1.0 for special landscapes
  - Revise downward in 2018 based on analysis of existing data and pilot project with 30 agencies

Implementation: Efficiency Standards

- **Commercial, Industrial, & Institutional (CII)**
  - Proposed approach: Establish performance measures
    - All dedicated irrigation accounts will be on a budget using outdoor standards
    - Require classification (NAICS) by (2021), develop benchmarks.
    - Require all mixed meter accounts to split off landscape greater than a size threshold to dedicated irrigation accounts (or equivalent technology) by 2021.
    - Audits and water management plans for reporting efficiency in CII water use. Audits and plans for subset of CII customers, based on volume, percentage, or number.
- **Water Loss**
  - SB 555 Standards
    - State Water Board rulemaking to commence in 2019 with standards set in 2020
  - Will include real and apparent losses

Draft Framework:
Water Use Target Calculation

Targets calculated by adding the volume or GPCD from sector budgets, but not CII

Illustrative Target Calculation with Sample Numbers:

Sector	Budget (vol.)	Budget (GPCD)
Indoor Residential	4,570,744	55
Outdoor Landscape	3,729,166	44
CII	1,652, 379	22
Water Loss	530,560	7
TARGET	10,482,849 (CCF)	128 (GPCD

Implementation: Use Water More Wisely

- Progress reports beginning in 2019 to describe actions suppliers will take to meet 2025 requirements.
- Compliance in 2025 reporting period, as documented in 2026 compliance report and 2025 UWMP (submitted in July 2026)
- State agencies are developing methods to support compliance from 2021 through 2025.

Implementation: Strengthen Local Drought Resilience

WATER SHORTAGE CONTINGENCY PLANS

IMPROVE DROUGHT PLANNING FOR SMALL WATER SUPPLIERS AND RURAL COMMUNITIES

Strengthening Local Drought Resilience

- *(EO#8) The Department shall strengthen requirements for urban Water Shortage Contingency Plans, which urban water agencies are required to maintain. These updated requirements shall include adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. While remaining customized according to local conditions, the updated requirements shall also create common statewide standards so that these plans can be quickly utilized during this and any future droughts.*

Goal / Deliverables

- *To develop standard WSCP requirements to assure water supplier drought resilience and forestall the need for State mandated actions*
- *To recognize the need for supplier-specific flexibility for responding to actual or potential shortages*
- *To assure transparency and accountability to both customers and state agencies*

Approach

- **Plan**: Develop supplier-specific WSCP with defined elements
- **Assess**: Use defined process to annually assess conditions and respond with supplier-appropriate actions
- **Respond**: Implement supplier appropriate actions already defined in WSCP (based upon assessment results)
- **Report**:
  - Submit annual assessment to State agencies
  - Submit WSCP every 5-years with UWMP
  - Submit monthly status when certain stages activated

Stakeholder feedback

- The State needs to define the "problem" being fixed
- State-mandated "one-size-fits-all" percentage reduction goals do not work due to wide variety in supplier-specific circumstances
- Future supply conditions should reflect potential effects of: climate change, future regulatory constraints, hydrology variability, etc.
- Statewide standard "stages" must allow for supplier-specific local actions
- Voluntary demand reduction activities should be differentiated from "mandatory" reductions actions
- Triggers that drive locally-relevant responses should be clear

Stakeholder feedback (cont.)

- Recognize that supply portfolio management and temporary supply augmentation may be part of a supplier's WSCP responses
- An economist should be involved in WSCP development
- The State should utilize existing supplier reporting and analyses when developing WSCP requirements
- Clearly differentiate that the long-term demand management from temporary WSCP response actions
- If the State may mandate conservation actions, it needs to clearly define predictable assessment processes and triggers so suppliers can plan accordingly

Stakeholder Feedback (cont.)

- Regional or statewide mandated demand reduction seems unnecessary if suppliers are successfully implementing their WSCPs
- The State agencies should facilitate regional communications and coordination, and should coordinate amongst themselves with data and analysis
- The State needs to clarify how it may define a "region"
- Separate short term vs. long term planning

Urban water suppliers submit a WSCP that:

1. Defines Annual Assessment Schedule and Procedures (WBF)
2. Defines Annual Assessment Methodology
3. Defines Evaluation Criteria – a set of Evaluation Criteria (EC) that will be used to conduct the WBF and the 5-DRA
4. Defines Shortage Response Actions to mitigate actual or potential shortage
    a. Supply management and augmentation
    b. Voluntary and mandatory demand reduction
    c. Customer incentives/disincentives
5. May include Shortage Thresholds
6. Defines Staged Mandatory Demand Reduction Actions
7. Establishes a "Communications Plan" with budgets, messages, methods, etc., that vary with responses

WSCP elements (cont.)

8. Demonstrates existing/new implementation authority
9. Addresses financial elements(fiscal impacts, reserve funds, SB814 fees, drought rates, etc.)
10. Articulates reporting process, data, and timing
    - Internally (e.g. to elected board/council)
    - Externally to customers and neighboring suppliers or counties
    - To State agencies
11. Details Customer Compliance, Enforcement mechanisms and exemption process
12. Establishes a Review/Improvement Process to assess and adjust:
    - The "Annual Assessment" process
    - The response actions

Element	Related water code or regulation
1. Annual Assessment Schedule and Procedures	None
2. Annual Assessment Methodology a. Annual Water Budget Forecast b. Annual 5-year Drought Risk Assessment	 None 10632(a)(2)
3. Evaluation Criteria a. For the Water Budget Forecast i. Current year available supply ii. Current year demand iii. Existing infrastructure b. For the 5-year Drought Risk Assessment i. Historic hydrology ii. Plausible climate change affects iii. Plausible regulatory affects iv. Demand projections v. Infrastructure capabilities/constraints	 Similar in concept to SWRCB's "stress test" emergency regulation None
4. Shortage Response Actions a. Progressive series of locally appropriate supply augmentation and short-term demand reduction b. Include actions to respond to at least 50% reduction compared to recent average deliveries	 10632(a)(1); 10632(a)(3) Item c(ii): SBX 7-7 MWELO & EO B-29-15 10632(a)(1)
5. Shortage Thresholds (at least three groupings)	10632(a)(1)
6. Staged Mandatory Demand Reduction Actions that align with reduction targets of: a. Up to 10% b. Up to 20% c. Up to 30% d. Up to 40% e. Up to 50%	10632(a)(5)
7. Communication Plan	None
8. Customer Compliance, Enforcement, and Appeal/Exemption Process	None
9. Implementation Authorities	10632(a)8)
10. Financial Plan for Drought Conditions	10632(a)(6); 10632(a)(7)
11. Monitoring and Reporting Requirements and Procedures	10632(a)(9) SB 610 and SB 221
12. Re-evaluation and Improvement Process	None

State Agency Role

- Monitor regional and statewide conditions
- Review WSCPs and data
- Provide increased Technical and Financial Assistance for preparing and implementing WSCPs and related response actions
- Develop *Reporting, Compliance, and Enforcement* protocols to ensure suppliers are adequately prepared for more severe and frequent drought conditions

State's reporting, compliance and enforcement protocols

- Objective
  - Document compliance with WSCP requirements
  - Establish a data record that can be useful in analysis, oversight and drought-risk evaluations
  - Provide transparency and accountability
- Timing
  - Supplier would submit required information to the the State by __[date?]____ each year
  - Reporting would utilize existing State reporting requirements (data, formats, platforms) as appropriate to minimize redundancy and supplier resources

RCE Protocols (cont.)

- Potential Data
  - Prior year's production volume
  - Current year's projected customer demand (prior to any reduction goal), and projected demand for next 5 years
  - Current year's supply, and projected available supply for next 5 years (potentially for multiple supply scenarios)
  - Selected responses (if any), accompanied by estimated supply augmentation and/or demand reduction (voluntary or mandatory)
  - Access/weblinks to materials presented to supplier's elected body detailing Annual Assessment data, analysis, results and recommendations (e.g. staff report)
  - Monthly submittals in declared drought emergency

RCE Protocols (cont.)

- Potential Compliance
  - Submittal of complete and adequate WSCP to DWR
  - Submittal of annual assessment and five year dry period data to DWR and monthly status to SWRCB, if WSCP activated
- Potential Enforcement
  - Non-submittal of compliant WSCP or required reports
  - Non-implementation of supplier's own WSCP, if activated

Annual and Five Year Dry Period Assessments

- Proposed variants
- 1. Annual self assessment (WBF)

  a. submit with UWMP or if trigger invokes WSCP

  b. five year dry period submitted with UWMP
- 2. Annual self assessment (WBF) in current year plus five year dry period submitted to State annually

Annual and Five Year Dry Period Assessments Recommendation

- Water suppliers shall conduct an Annual Water Budget Forecast (supplies and demands) covering the period May through April, and report the budget forecast to the Department of Water Resources each April. Water suppliers shall also conduct a 5-Year Dry Period Assessment each year, and report the assessment in their 5-year Urban Water Management Plan, as well as in years when the supplier invokes or increases a stage/level of their Water Shortage Contingency Plan.

EO B-37-16 | Timeline

Questions?