

Draft for discussion at the 10-20-2016 UAG meeting.

Recommendations:

The framework recommends actions to be undertaken by both urban water suppliers and State agencies to achieve the following primary objectives:

- Assure that an urban water supplier has adequately planned for, and can quickly respond with adequate, pre-determined actions, to droughts lasting at least five years, as wells as during more frequent and severe periods of drought; and
- Provide State agencies with information necessary to evaluate specific urban supplier responses throughout the State to drought conditions, to allow focused attention where necessary and forestall overarching mandates that may conflict with existing adequate local plans and responses.

To achieve these objectives, DWR's recommended framework can be summarized as setting forth the following requirements for urban water suppliers and State agencies:

1. For Urban Water Suppliers
 - a. Prepare and submit a *Water Shortage Contingency Plan* every 5 years
 - b. Annually conduct a *Water Budget Forecast* to evaluate current-year shortage risks, then select and implement the appropriate actions corresponding to the results
 - c. Annually conduct a *5-year Drought Risk Assessment* to (1) help the supplier develop appropriate responses to address plausible worst-case conditions, and (2) help the supplier consider current year operations in the context of plausible continued dry conditions
 - d. Report required assessment and response information to customers and the State
2. For State Agencies
 - a. Establish compliance criteria for WSCP
 - b. Establish reporting requirements and submittal tools
 - c. Clarify or establish enforcement actions for non-compliance
 - d. Update and improve the 2008 Urban Drought Guidebook
 - e. Upon submission, evaluate WSCPs for compliance
 - f. Annually evaluate water supply conditions statewide
 - g. Annually evaluate water supplier assessment and response submittals
 - h. Provide technical assistance as necessary
 - i. Implement enforcement provisions as necessary

The framework is further described in the next subsections.

Urban Water Suppliers

Each urban water supplier shall prepare and adopt an updated stand-alone WSCP and submit it to the state for review and acceptance. A key component of the WSCP will be setting forth the

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methodologies, data requirements, and policy considerations for an annual assessment of shortage risks in the current year, as well as an annual assessment of a five-year dry period.

Following the procedures detailed in the adopted WSCP, the supplier will annually assess its actual or potential water shortage condition, respond accordingly, and report pertinent information to the State.

Contents of the Water Shortage Contingency Plan

The supplier's WSCP must provide details for each of the following standard sections:

- a. Annual Assessment Schedule and Procedures – Define the decision making process and schedule that will be undertaken each year to conduct the annual assessments.
- b. Annual Assessment Methodology – Define the methodology and data requirements necessary to conduct:
 1. Annual *Water Budget Forecast* (WBF) assessing shortage risks for the current year, where results are used to trigger Shortage Response Actions (SRAs)
 2. Annual *5-year Drought Risk Assessment* (5-DRA) assessing shortage risks for the next five years, at a minimum, if the next five years were a continued drought.
- c. Evaluation Criteria – Define a set of Evaluation Criteria (EC) that will be used to conduct the WBF and the 5-DRA. The EC shall include, but not be limited to these factors:
 1. For the WBF:
 - i. Current year available supply, considering hydrologic and regulatory conditions
 - ii. Current year unconstrained demand, considering weather, growth or other influencing factors
 - iii. Existing infrastructure capabilities
 2. For the 5-DRA:
 - i. Historical hydrology
 - ii. Plausible climate change affects for existing supplies
 - iii. Plausible regulatory changes that can affect existing supplies
 - iv. Demand projections
 - v. Infrastructure capabilities and plausible constraints
- d. Shortage Response Actions – Define a progressive series of SRAs that include locally appropriate, supply augmentation and short-term demand reduction actions necessary to achieve desired supply reliability for potential shortage conditions. The SRAs must include actions necessary to respond to shortage conditions equivalent to at least a 50% reduction from average supplies delivered in the three most recent unconstrained demand years.
- e. Shortage Thresholds – Water supplier may include specific Shortage Thresholds (ST) to enable definitive grouping or packaging of the SRAs to improve decision making and communications. SRAs will be assigned within each ST.
- f. Staged Mandatory Demand Reduction Actions – Identify the specific subset of SRAs (or other unique actions) necessary to achieve only mandatory demand reductions. Actions shall align with mandatory demand reductions of:

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1. Up to 10%
 2. Up to 20%
 3. Up to 30%
 4. Up to 40%
 5. Up to 50%
- g. Communication Plan – Describe planned communications approach and anticipated actions intended to quickly inform customers, the general public, and regional and state interests, about current and expected water supply conditions as determined by the WBF, expected implementation of SRAs, and other necessary communications.
 - h. Customer Compliance, Enforcement, and Appeal/Exemption Procedures – Describe methods and procedures in place to (1) gain customer compliance with triggered SRAs – especially with actions requiring mandatory demand reductions, (2) enable enforcement to assure compliance, and (3) enable a customer appeal/exemption process that allows unique circumstances to be accommodated.
 - i. Implementation Authorities – Demonstrate that necessary authorities are in place to quickly implement SRAs triggered by the results of the annual WBF. Identify specific ordinances, resolutions or other authorities. Should a water supplier enter into a stage three scenario, as described herein, there should be a water shortage emergency declaration and all appropriate actions described in CWC 350 et. al, shall be implemented.
 - j. Financial Plan for Drought Conditions – Describe considerations and accommodations to manage financial affects when SRAs are triggered, including but not limited to customer rate adjustments, managing revenue impacts, and accommodating increased expenses. Specifically describe compliance with SB814 (CWC 366).
 - k. Monitoring and Reporting Requirements and Procedures – The supplier shall outline its internal and external monitoring and reporting procedures to assure appropriate data is being collected, tracked and analyzed for purposes of monitoring customer compliance, and to meet State reporting requirements.
 - l. Re-evaluation and Improvement Process – The supplier shall identify procedures for monitoring and systematically evaluating the functionality of its WSCP to assure risk tolerance is adequate, and appropriate mitigation strategies are available.

Implementing the Water Shortage Contingency Plan

As articulated in the WSCP itself, the supplier will annually follow its prescribed procedures to assess current year water supply reliability conditions. Specifically, the supplier will:

- a. Water Budget Forecast – The supplier will annually conduct its WBF following the instructions set forth in its WSCP. The results of the WBF will be compared with the established STs to determine which, if any, SRAs are triggered.
- b. 5-Year Drought Risk Assessment – The supplier will annually conduct a 5-DRA that evaluates plausible worst-case supply/demand conditions for at least the next five years. Suppliers will provide supporting bases for selected supply scenario(s), with the intent that the supplier is demonstrating to the State that it is adequately anticipating potential worst-case conditions in the near term.

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