



***LONG-TERM CONSERVATION
FRAMEWORK BRIEFING
DEPARTMENT OF WATER RESOURCES***

EDUCATION – ADVOCACY – LEADERSHIP

March 15, 2019

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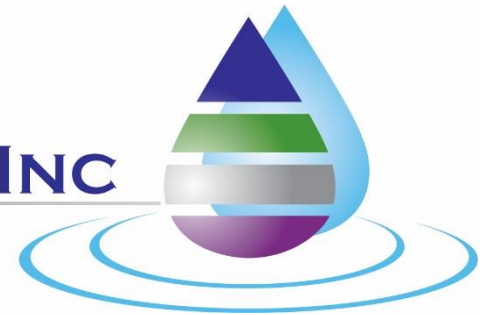
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MEDIA CONTRIBUTOR

Mountain Democrat

Dawn Hodson, reporter



Department of Water Resources

Peter Brostrom, Manager

Water Use Efficiency Program





Implementation of the 2018 Water Conservation Legislation

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California Department of Water Resources



Primer: Water Conservation Legislation Reference Document

Public Review Draft



MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

Primer of 2018 Legislation on Water Conservation and Drought Planning

PREPARED BY



California Department
of Water Resources

AUGUST 2018

Key Elements in 2018 Legislation

Urban Water Use Efficiency

- Urban water use objectives based on water use efficiency standards
- Commercial, industrial, and institutional (CII) performance measures

Drought Resiliency

- Water shortage contingency planning
- Countywide drought planning for small water systems and rural communities

Agricultural Water Use Efficiency and Drought Planning

- Enhanced agricultural water management planning

Applicability

Urban Water Supplier:

- 3000 Connections or
- Supplies 3000 ac-ft of potable water



4.DROUGHT PLANNING FOR URBAN WATER SUPPLIERS

Drought Planning for Urban Water Suppliers

New Requirements

- Annual water shortage assessment report
- Standardized water shortage contingency plan

Annual Water Shortage Assessment Report

By June 1st, starting in 2022, suppliers submit an annual water supply and demand assessment to DWR.

- Assume a subsequent dry year
- Includes information if applicable on:
 - Level of anticipated shortage
 - Water shortage contingency actions planned or implemented.
- State Water Board to defer to implementation of locally adopted WSCP to the extent practicable during drought emergency.'
- DWR summarizes assessments and reports to the State Board by September 30th.

Water Shortage Contingency Plan (WSCP)

Specific content requirements, including

- Six standard water shortage levels or equivalent
- Shortage response actions
- Compliance, enforcement, appeal, and exemption procedures



10. DROUGHT PLANNING FOR SMALL WATER SYSTEMS AND RURAL COMMUNITIES



Drought Planning for Small Water Systems and Rural Communities

New Authorities and Requirements

- Identification of at-risk systems and communities
- Countywide drought planning process



Identification of At-Risk Systems and Communities

DWR to conduct studies and investigations to identify water supply risks and vulnerabilities of small water suppliers and rural communities.

Schedule

DWR to notify the public, counties, cities, and groundwater sustainability agencies of its findings by Jan 1, 2020.

Countywide Drought Planning Process

DWR, in consultation with State Water Board, to develop recommendations and guidance for addressing drought planning needs of small water systems and rural communities.

- Assessment of drought vulnerability
- Actions to reduce drought vulnerability
- Response, financing, and communication
- Data needs and reporting
- Roles and responsibilities

Report due to the Governor and Legislature by Jan 1, 2020.



9. AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING

Agricultural Water Use Efficiency and Drought Planning

New and Revised Requirements

- Aggregated farm-gate delivery report
 - April 1 annual submittal date
 - Report within service area by groundwater basin
 - Applies to supplier's who provide water to more than 2000 acres
- Agricultural water management plan
 - Water budget quantification
 - Efficiency calculation
 - Enforcement provisions

3.URBAN WATER USE



Background

- 1993-2009 BMP Implementation
- 2010-2020 20% x 2020 GPCD
- 2022- Urban Water Use Objectives



Urban Water Use Efficiency

Two main programs:

- Urban water use objective
- CII performance measures

Water Use Objectives:

Indoor Residential Budget

+

Outdoor Residential Budget

+

CII Dedicated Irrigation Account

+

Distribution System Water Loss Budget

Indoor Residential Budget=

Res. Pop x Indoor Standard x 365 days/year

Outdoor Residential Use Budget =

Landscape Area x ETo x Landscape Standard

Water Use Efficiency Standard for Indoor Residential Use

Set in legislation, unless DWR/State Water Board recommend higher standards

- 55 GPCD until Jan 1, 2025
- 52.5 GPCD between Jan 1, 2025 and Jan 1, 2030
- 50 GPCD after January 1, 2030

DWR to study indoor residential water use and with State Water Board submit recommendations to the Legislature by Jan 1, 2021

Outdoor Water Use Standard

Separate standard for Outdoor Residential and CII landscapes irrigated with water from dedicated irrigation meters

- Standard based on irrigable landscape area and the local evapotranspiration
- DWR to provide service area landscape area data and individual parcel data by Jan 1, 2021.
- DWR to develop outdoor water use standards recommendations to submit to State Water Board for their consideration by Oct 1, 2021.
- State Water Board to adopt standards by Jun 30, 2022

Water Use Efficiency Standard for Distribution System Water Loss

SB 555 (existing requirements)

- State Water Board adopts standard by Jul 1, 2020
- Currently holding pre rulemaking stakeholder workshops

Variances

Significant and unique uses of water.

Legislation lists 8 uses of water to study and consider:

- Evaporative cooler
- Horses and livestock
- Seasonal population
- Highly saline recycled water
- Soil compaction and dust control
- To sustain wildlife
- Fire protection
- Agricultural use

DWR to develop recommendations to submit to State Water Board for their consideration by Oct 1, 2021.

State Water Board to adopt standards by Jun 30, 2022

Additional Notes on Urban Water Use Objective

- Standards have to be set at a level to exceed the statewide 20x2020 conservation targets
- Bonus provided for potable reuse
- DWR to develop recommendations on guidance and methodologies for calculating water use objectives by Oct 1, 2021 for State Water Board's consideration.
- State Water Board to adopt by Jun 30, 2022.

CII Performance Measures

CII water use too diverse for volumetric objectives,

- Performance measures may include:
 - CII water use classification systems
 - Water audits and/or water management plans
 - Other measures

DWR to conduct necessary studies to develop recommendations for Board consideration by October 1, 2021. Board to adopt performance measure regulations by June 30, 2022.



Landscape Area Measurement Cont.

- DWR Direct to measure landscape area for 400 plus retail urban retail suppliers
- Measurements made for the service area aggregate landscape area
- Measurements made for a point in time, landscape area changed be adjusted as service area changes

Pilot Projects

Landscape area measurement relatively new technology started with pilot projects with two objectives:

1. Develop definition and classification scheme for:
 - Irrigated Landscape
 - Irrigable Landscape
2. Test accuracy of remote sensing methodology to measure landscape area

Pilot Projects Cont.

2018- Completed a pilot with the City of Santa Rosa and Padre Dam Water District

2019-

1. Finishing 2nd pilot with North Marin and Rancho California
2. Starting 17 agency pilot with diverse landscape across the state
3. Regional Pilot

2021- Complete all 403 Retail Water Agencies

Landscape Definition and Classification:

Measure 3 Categories:

- Irrigated
- Irrigable-Not Irrigated
- Not Irrigable

Irrigated + Irrigable-Not Irrigated = Irrigable

Irrigated landscape



Green Grass
Trees and Shrubs
Swimming Pools

Irrigated- agriculture/ranchettes



Irrigable-Not Irrigated



Irrigable- Not Irrigated



Irrigable-Not Irrigated-Mulch



Not Irrigable-hardscape and undeveloped land



Not Irrigable-Native Vegetation





Stakeholder Outreach

Workgroups:

1. Landscape area
2. County Drought
3. Wholesale Water Loss
4. Water Use Studies
5. Standards, Methodologies and Performance Measures
6. Urban Water Management Plan Guidebook
7. Annual Water Supply Assessment
8. Model Water Efficient Landscape Ordinance
9. Agricultural Water Management Plan Guidebook

Near-term Projects

- Wholesale Water Loss Reporting Feasibility Study and Recommendations
- Residential Indoor Water Use Study
- Residential Outdoor Water Use Study
- Outdoor Landscape Area with Dedicated Irrigation Meters for CII Water Use Study
- Recommendations for Urban Water Use Standards, Guidelines and Methodologies for Calculating Urban Water Use Objectives, and Variances
- CII Performance Measures
- County Drought Recommendations
- Begin discussions on annual water supply assessment

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