

# State Framework for Long-term Urban Water Conservation Policy



## MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

Primer of 2018 Legislation on Water Conservation and Drought Planning  
Senate Bill 606 (Hertzberg) and Assembly Bill 1668 (Friedman)

PREPARED BY



California Department  
of Water Resources

AND



State Water Resources  
Control Board

NOVEMBER 2018

Landscape Advisory Committee Meeting  
March 25, 2019

# Discussion Outline



- State regulatory and legislative actions
  - 20x2020 Water Conservation Act of 2009 (SBx7-7)
  - Making Conservation a California Way of Life (SB 555, SB 606, AB 1668)
- What is means for utilities and communities
- General schedule and next steps
- Alignment with District policy/practice

# California 20x2020 Per Capita Targets



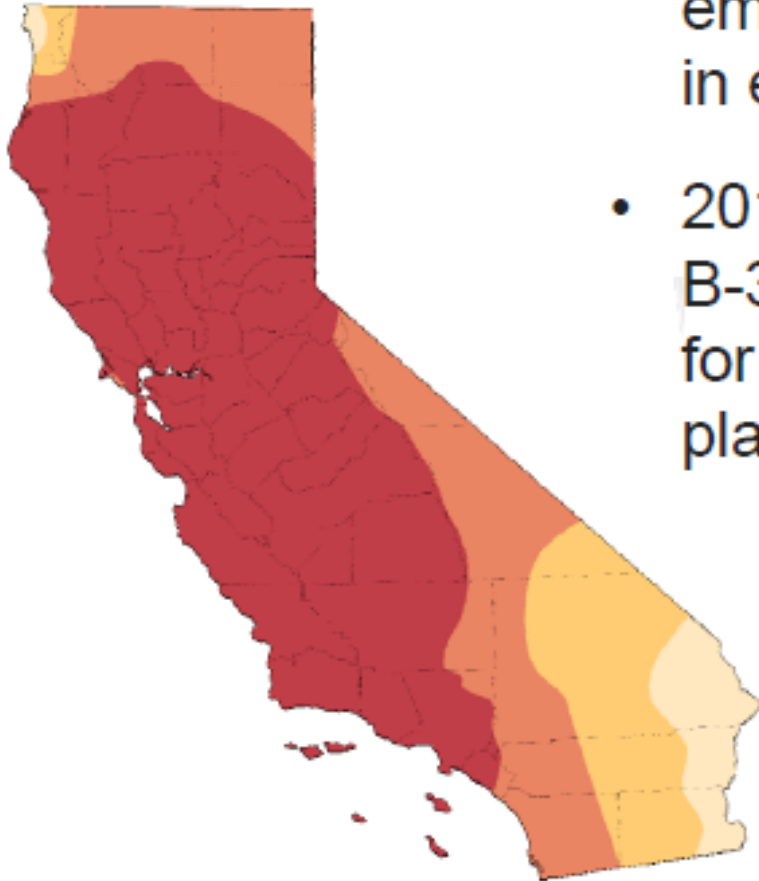
## 20x2020 Water Conservation Plan



February 2010

- Water utilities are provided four methodologies to reduce per capita water use
- EBMUD elected Target Method 2
  - A water budget approach

# Legislation Background



- California's 2012-2016 drought with emergency conservation regulations in effect
- 2016 Governor's Executive Order B-37-16 called for a new framework for water conservation and drought planning





# Regulatory & Legislative Actions to Implement Framework



- Existing regulatory/rulemaking authority:
  - Emergency drought regulations
  - Permanent water waste prohibitions
  - Water loss reporting (SB 555)
- Four areas requiring new statutory authorities:
  - New water use standards and targets
  - Water Shortage Contingency Plan requirements
  - Drought planning for small water suppliers and rural communities
  - Agricultural Water Management Plan requirements

# SB 606 & AB 1668 Legislation Overview



## SB 606 and AB 1668 as a package.

- Provides complementary authorities and requirements
- Covers water conservation and drought planning
- Affects urban water suppliers, agricultural water suppliers, and small water systems and rural communities

SB 606 and AB 1668 do not change existing implementation of SB X7-7 (Water Conservation Act of 2009).

- Implementation needs to result in conservation exceeding the current statewide targets.

# Legislation Overview

New authorities and requirements based on recommendations of 2017 Framework to achieve four primary goals in EO



Use water wisely



Eliminate water waste



Strengthen local drought resilience



Improve agricultural water use efficiency and drought planning

# Permanent Water Waste Prohibitions Still Pending



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Conserve... It's a California Way of Life.

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## Regulation on Waste and Unreasonable Water Uses

The State Water Board first adopted [drought emergency conservation regulations](#) in July 2014. Included in these regulations were prohibitions against certain wasteful water use practices. The Board expanded, updated, extended, and readopted the emergency regulations several times, most recently in February 2017. Governor Brown ended the drought State of Emergency in April 2017. In response, the State Water Board partially repealed the February drought emergency conservation regulations, maintaining urban water supplier reporting requirements and the prohibitions on wasteful water use practices. These remained in place until November 25th, 2017.

As directed by [Executive Order B-40-17](#), the State Water Board is conducting a rulemaking to prohibit wasteful water use practices. This rulemaking is part of a broader framework to make conservation a California Way of Life, a pillar of the [California Water Action Plan](#).

### Quick Links

- [Documents](#)
- [Rulemaking Process](#)
- [Subscription Lists](#)
- [Contacts](#)



## 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

# Water Efficiency Standard for Residential Indoor 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

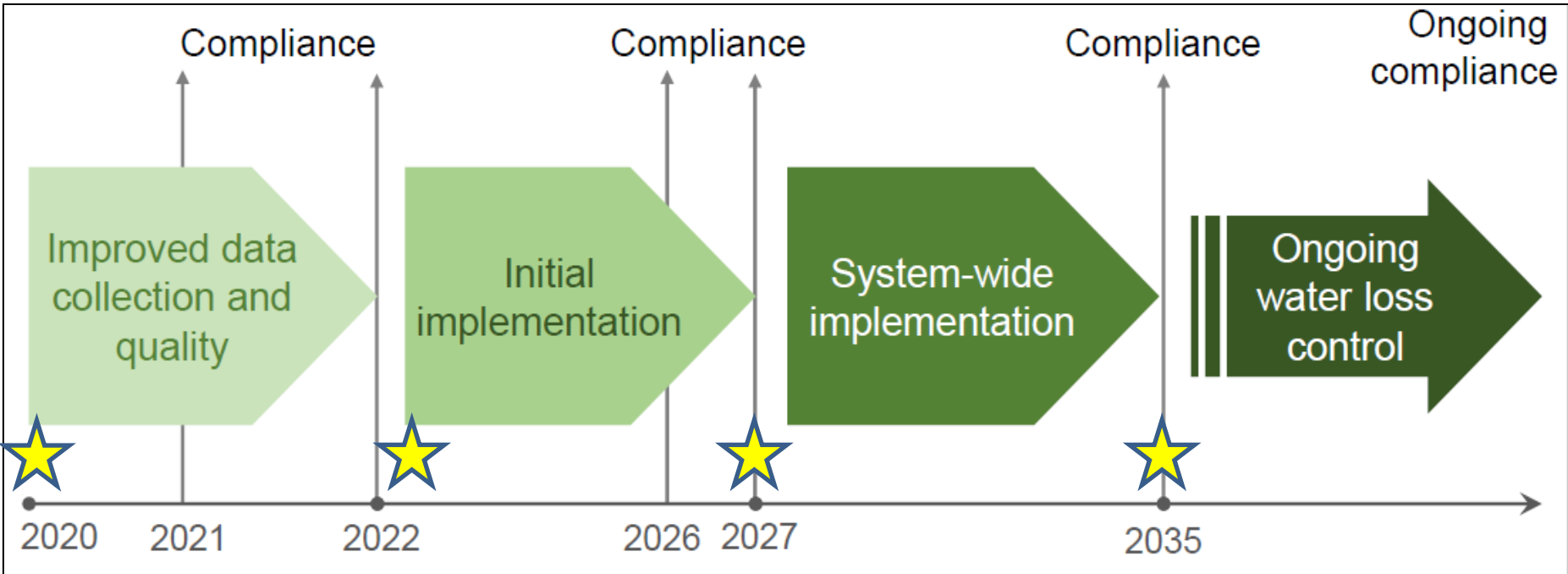
# Outdoor Water Efficiency Standard



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

# SB 555 - Water Loss Control Proposed Rulemaking





# CII Performance Measures



CII water use too diverse for volumetric objectives, legislation calls for the implementation of performance 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.
- Performance measures may include:
  - CII water use classification systems
  - Water audits and/or water management plans
  - Other measures

# State Long-Term Conservation Framework Water Use Objectives



Indoor Residential Use  
(55, 52.5, 50 gpcd)

+

Outdoor Residential Use

+

Dedicated Commercial  
Irrigation Use

+

Distribution System Water Loss

=

**Annual Water Use Objectives**



# Water Use Objective 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

- Standards have to be set at a level to exceed the statewide 20x2020 conservation targets
- 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.
- Legislative Analyst's review by Jan 10, 2024
- Joint policy committee hearings in Jan 2026 with attendance from DWR and State Water Board



# Near Term State 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
  - Reports to the Legislature

# Water Shortage Contingency Plan (WSCP)



State Water Board to defer to implementation of locally adopted WSCP to the extent practicable during drought emergency.

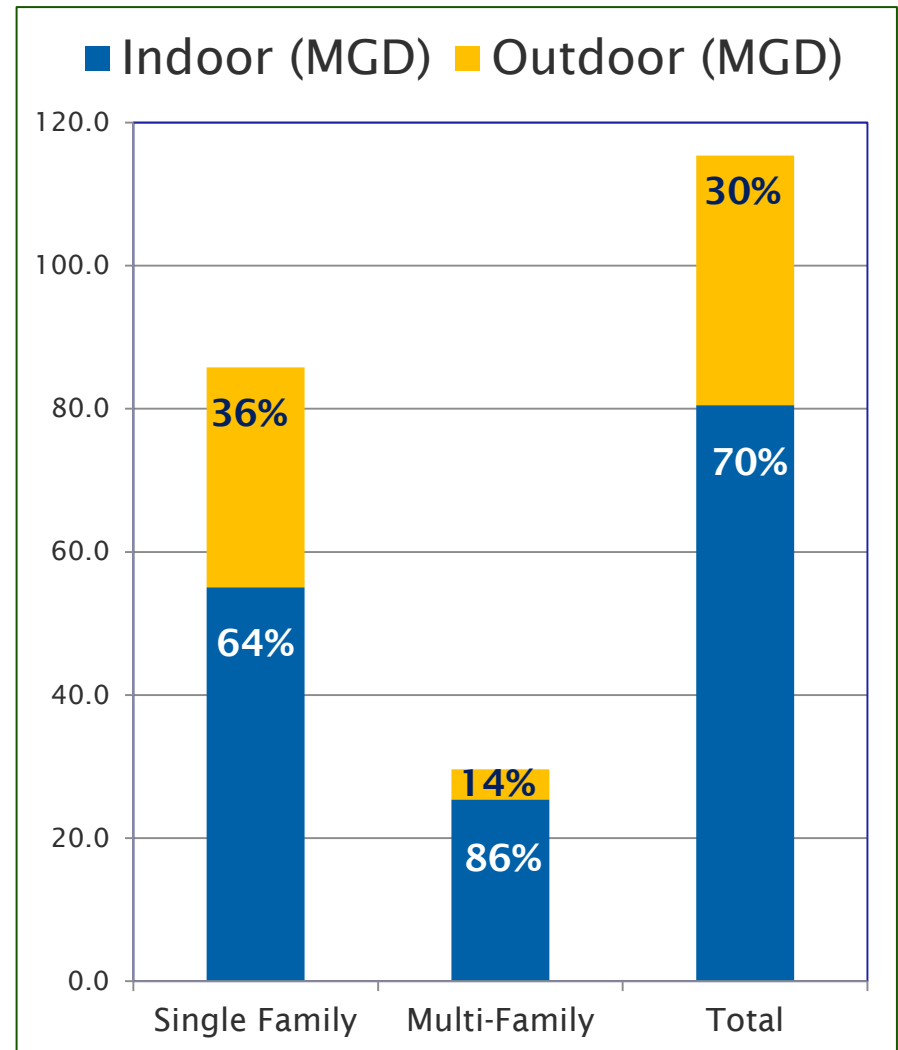
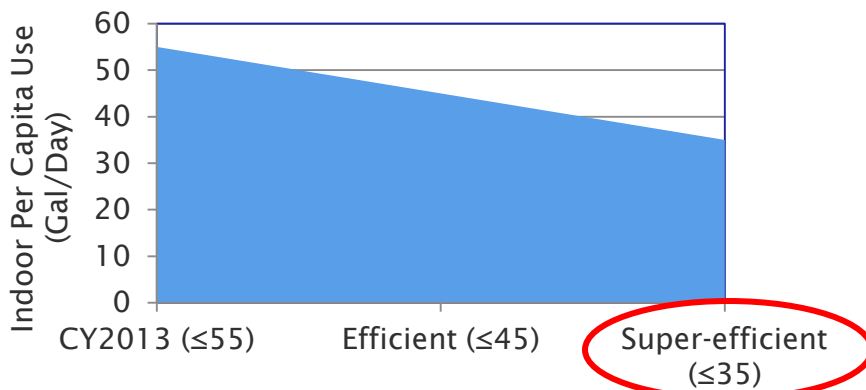
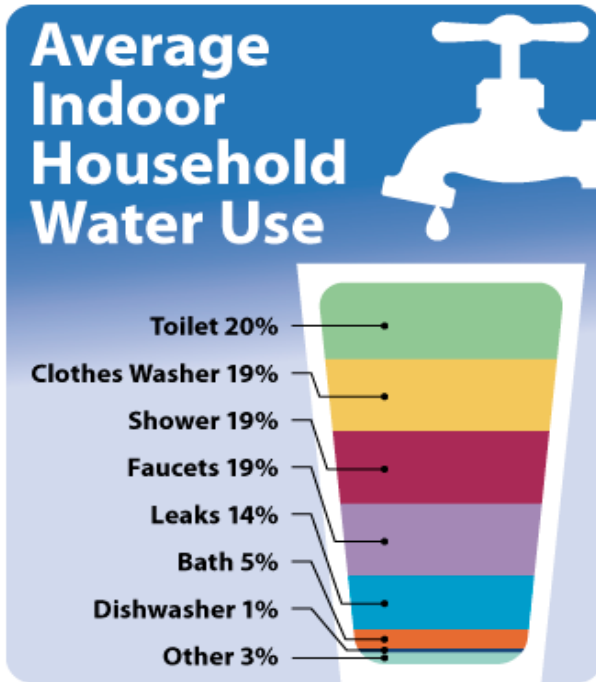
Specific content requirements, including

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

To examine water shortage risks based on the driest 5-year historic sequence for a water supplier's water supply

- Part of the water supplier's Urban Water Management Plan (UWMP)
- Assuming a drought lasting five consecutive water years after current year.
- Consistent with historical drought hydrology and reliability of each source of supply
- Replacing the existing UWMP requirement for multi-year drought evaluation

# Average Single-Family & Multi-Family Residential Use (2013)



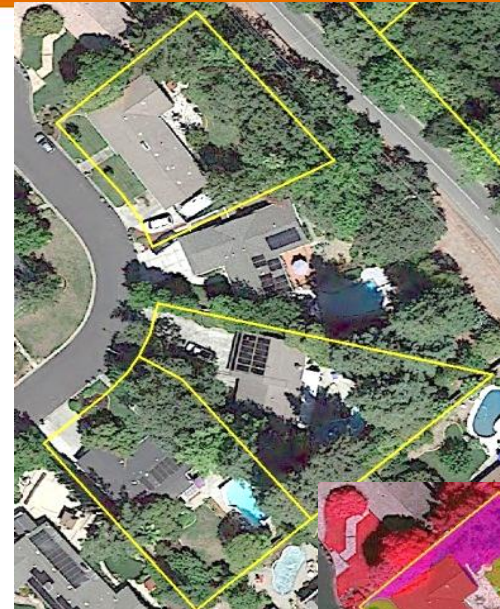


# 20x2020 System Wide Parcel Mapping & Computing Tools



- Completed individual parcel landscape water use budgets
  - >360,000 SFR, MFR and IRR parcels
  - 4-Band imagery/land classifications
  - 6 microclimate zones

Water Use Period	GPCD
10-Yr Baseline (1995-2004)	164
5-Yr Baseline (2003-07)	161
2020 Updated TM2 Calculation	167
5% Reduction from 5-Yr Baseline	<b>153</b>
2015 Interim Target	158
FY15	117
<b>2020 TARGET</b>	<b>153</b>



149  
no rationing

# 20x2020 vs. Long Term Water Use Objectives



## 2020 Target

Projected 2020  
Indoor Use

**55 GPCD**

Projected 2020  
Landscape Use

**59 GPCD**

Projected 2020  
CII Use

**52 GPCD**

## Water Use Objective

Projected 2020-30  
Indoor Use

**55, 52.5, 50 GPCD**

Projected 2023  
Landscape Use

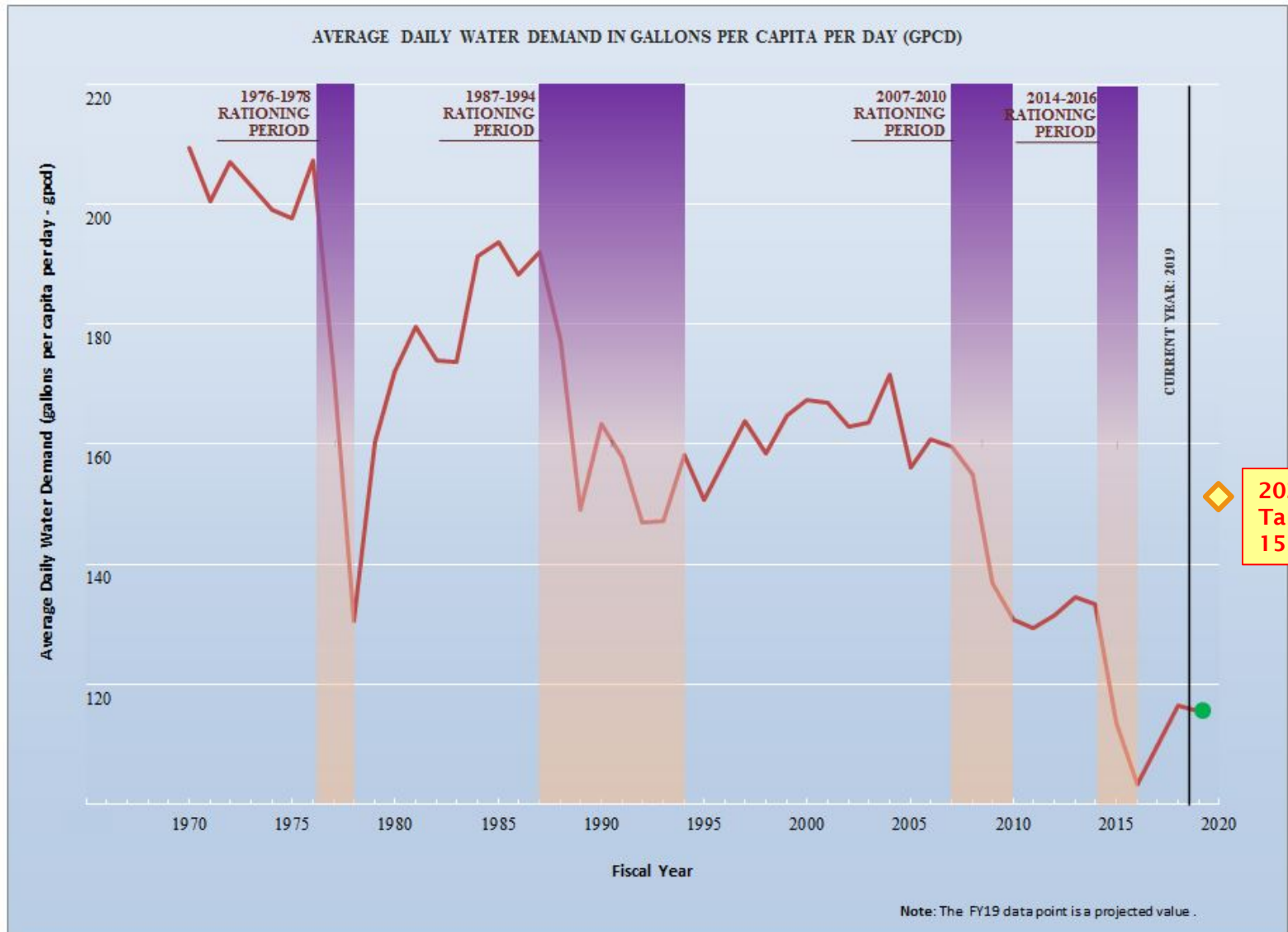
**TBD \***

Projected 2023  
System Water Loss

**TBD \***

*\* Pending State agency projects and standards rulemaking*

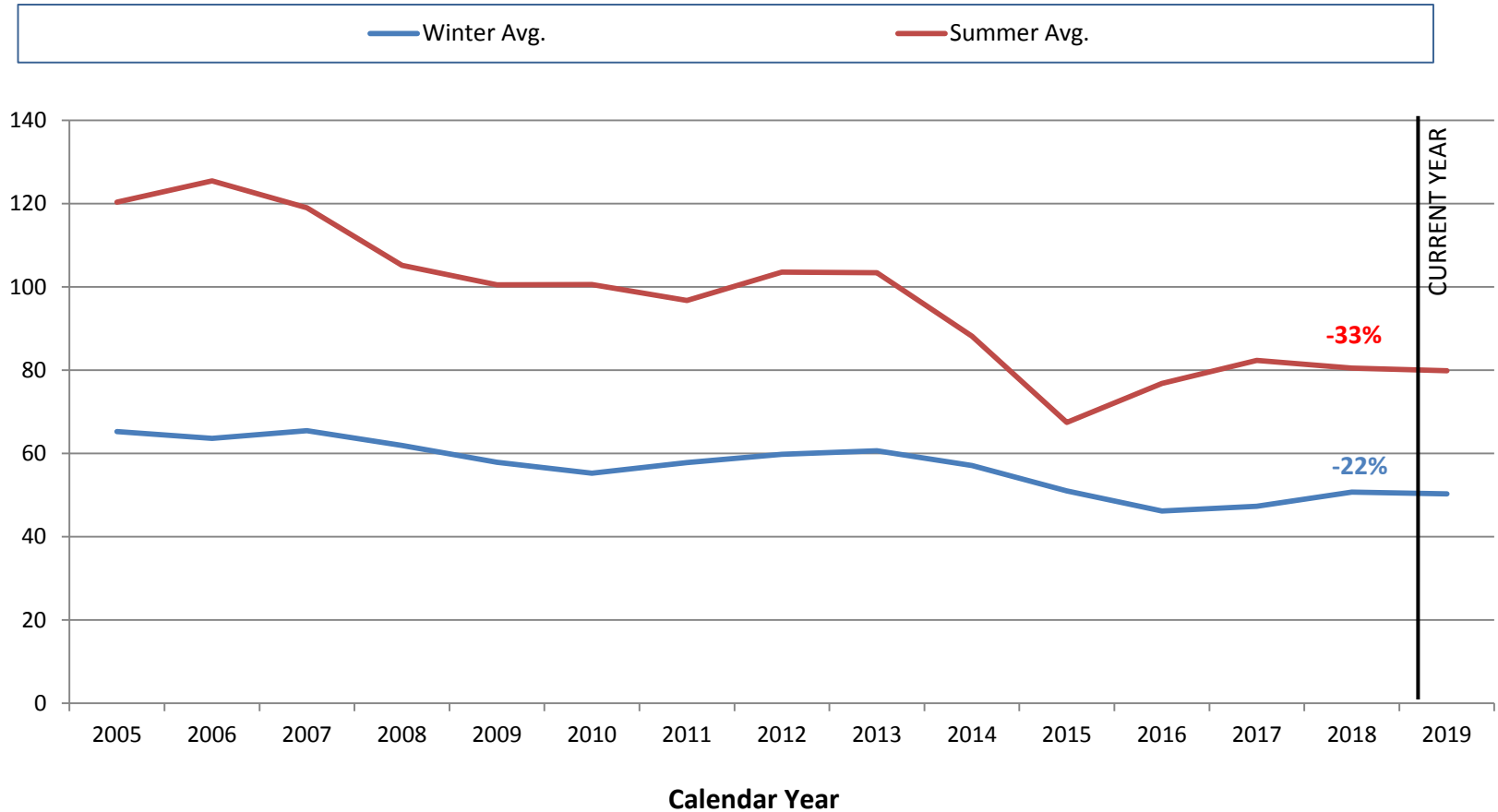
# Fiscal Year Gross Production GPCD (1970-2019 Projected)



# Residential Average Water Use GPCD (CY2005-2019 Projected)



Residential Average GPCD (2005-2019)





# Agency Coordination, Public Outreach & Stakeholder Engagement



Agency Coordination Team (ACT)

Topic-specific advisory groups



- **UAG** (Urban Advisory Group)
- **AAG** (Agricultural Advisory Group)
- **CDAG** (Countywide Drought Advisory Group):  
New group for drought planning of small water systems and rural communities

Public workshops, project workgroups, and meetings

Briefings and speaker bureau

Project websites and data portals

For more information:

<https://water.ca.gov/Programs/Water-Use-And-Efficiency>

# Stay Informed



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