

California Water Conservation Update

Making Conservation a California Way of Life

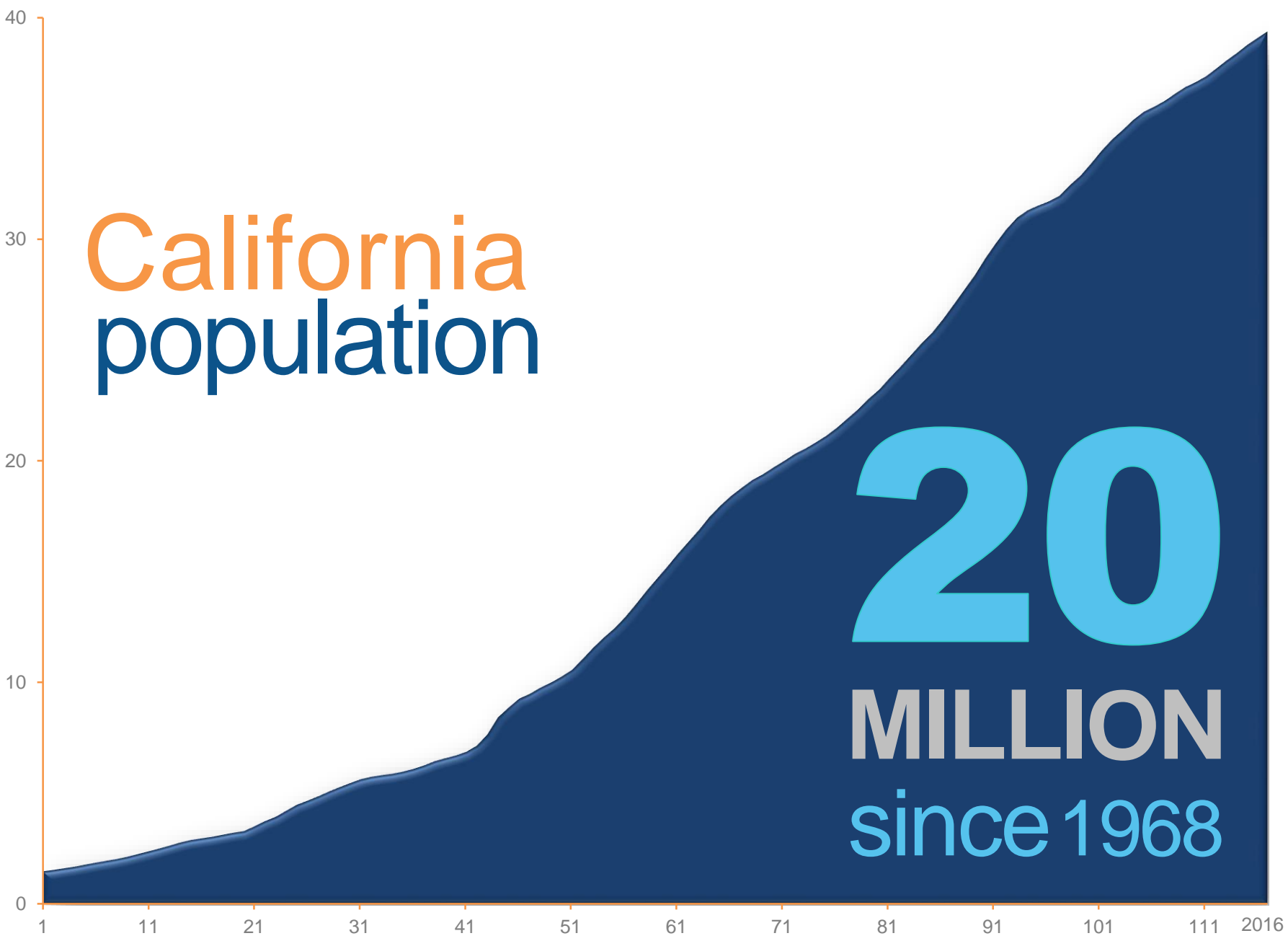
Kathy Frevert, California SWRCB

July 18, 2018



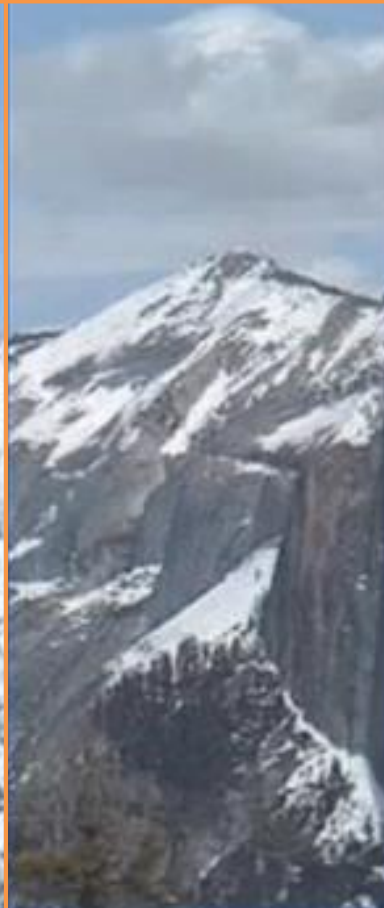
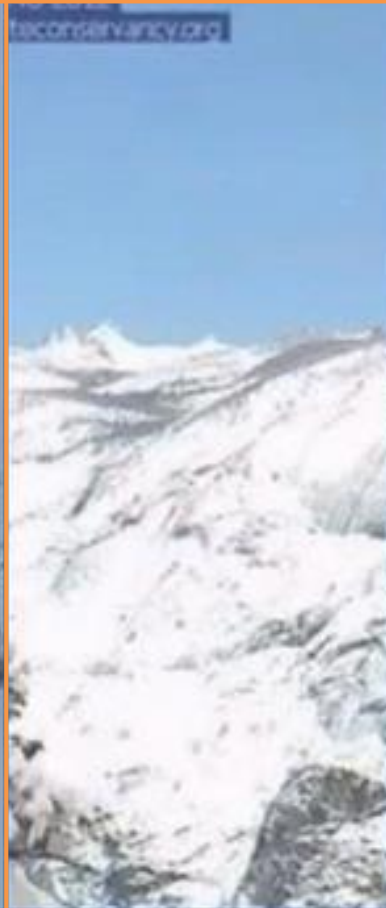
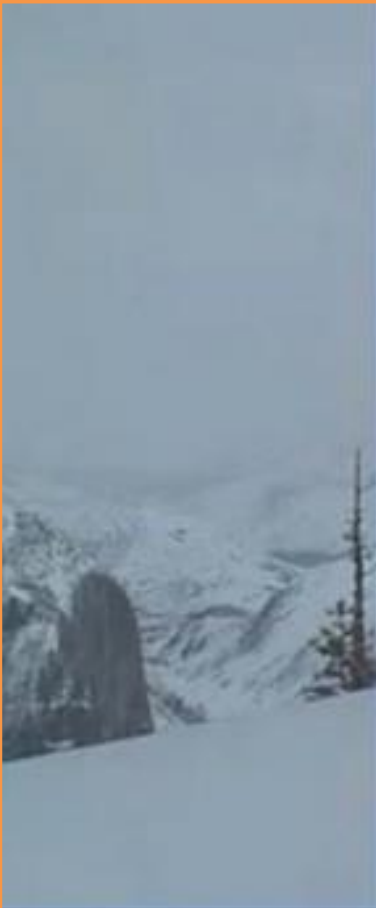
California population

Population (millions)



20
MILLION
since 1968

Yosemite



2011

2012

2013

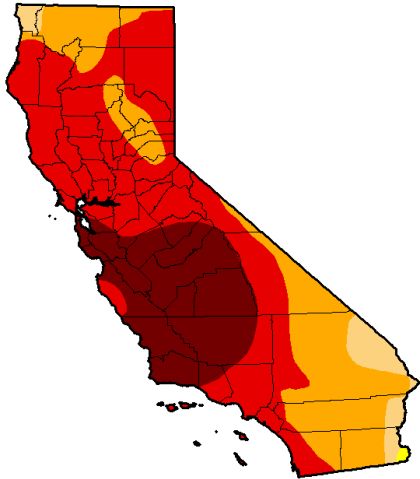
2014

2015

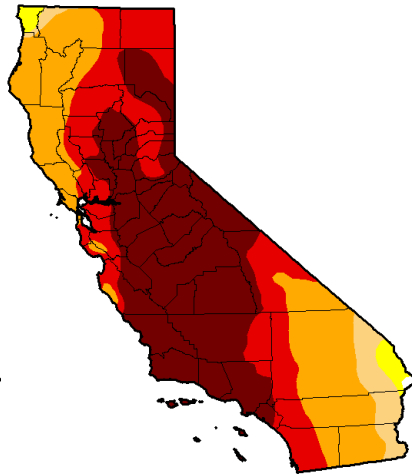
Third week of March

CALIFORNIA

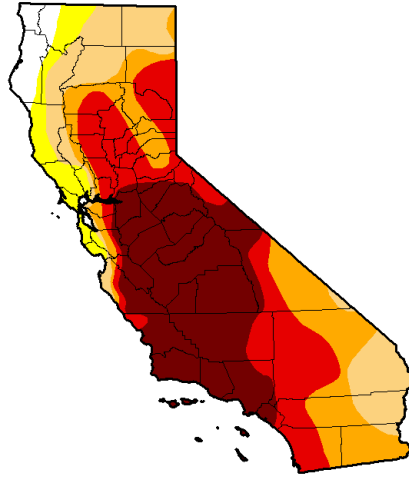
Drought Over Time



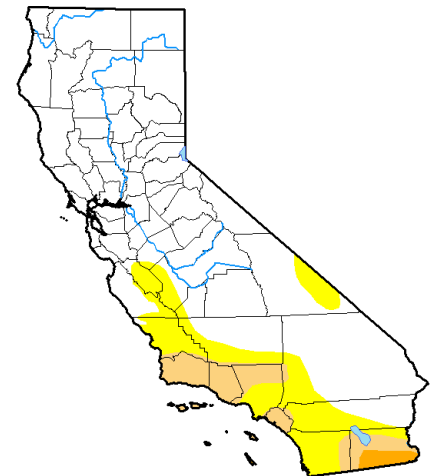
2014
Reporting,
prohibitions,
voluntary
actions



2015
25% mandatory
urban water
conservation



2016
Conservation
standards
adjustment;
stress test



2017
Drought
Emergency
Rescinded

Emergency Regulations in place

Exceptional

Extreme

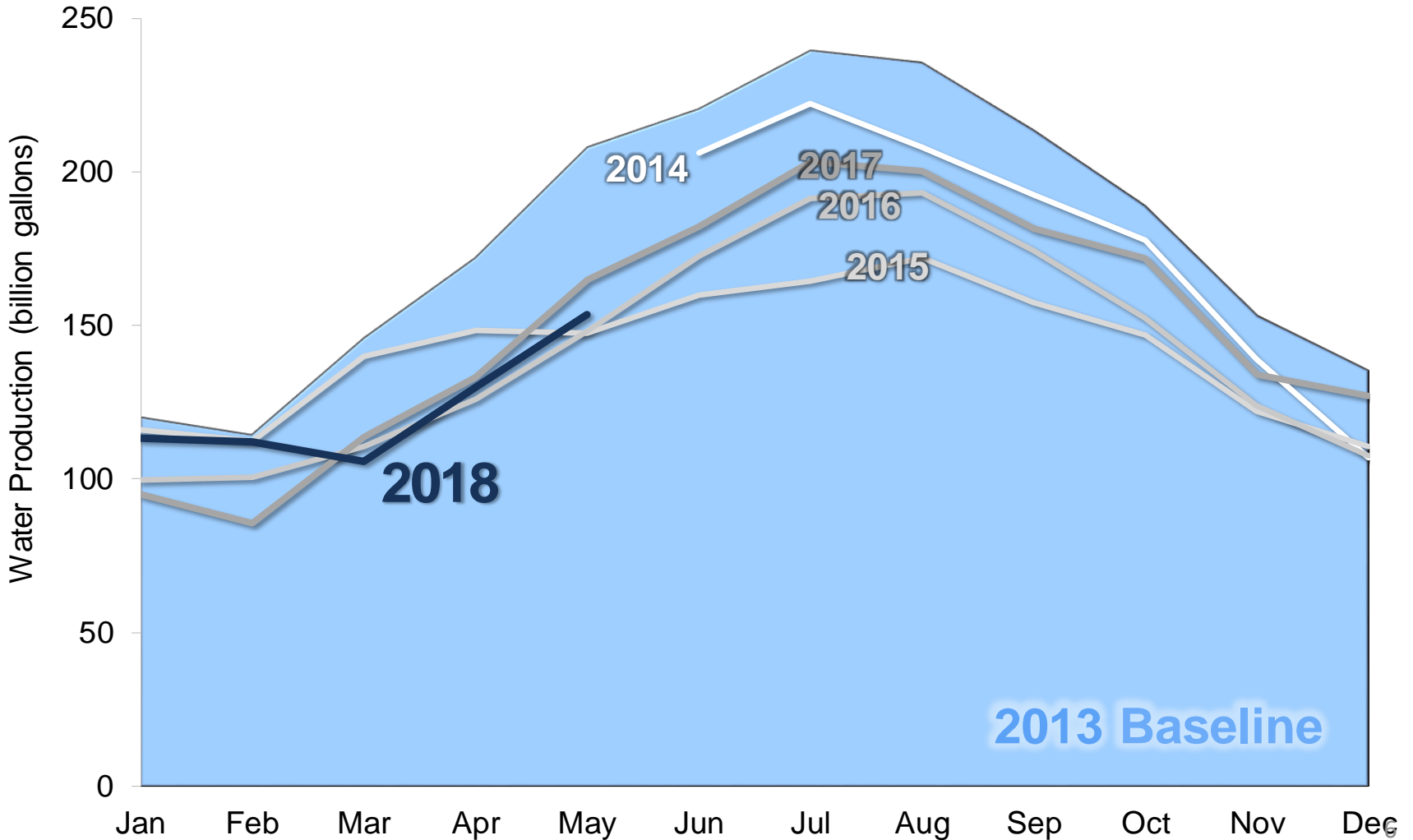
Severe

Moderate

Abnormal

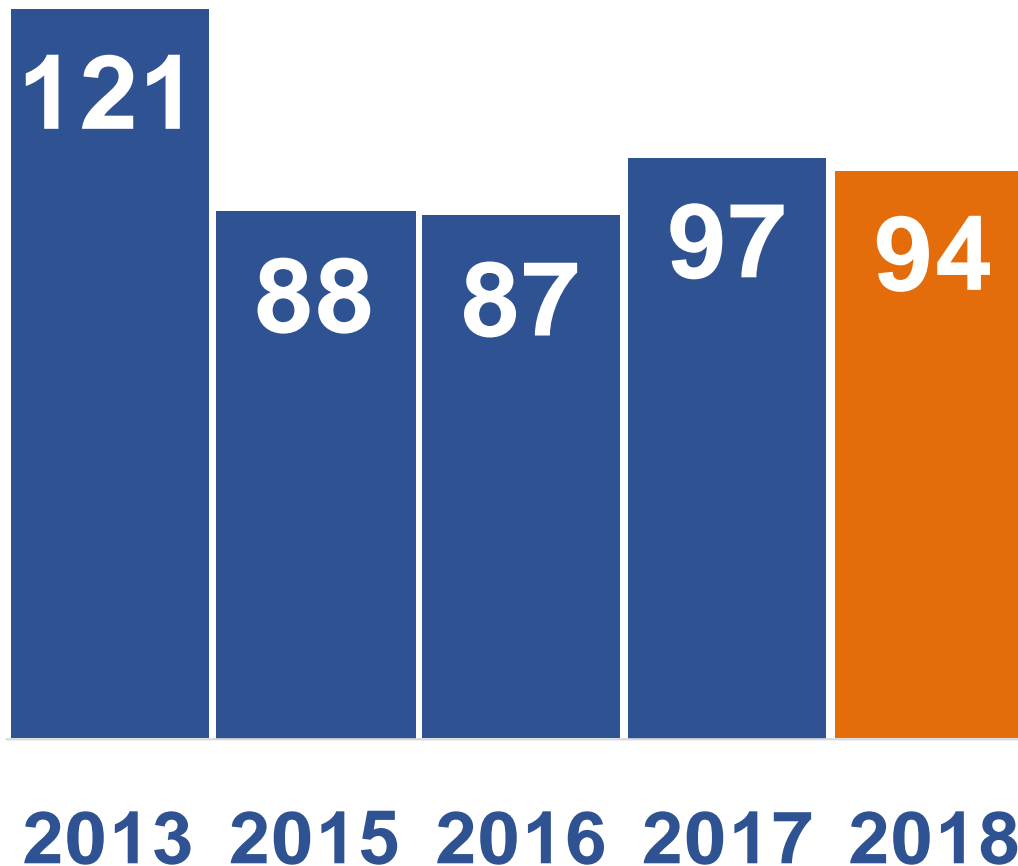
Statewide urban water production

Over 107 Billion Gallons Saved in 2018



May Monthly Residential Use* Gallons per Capita Daily

** includes both indoor and outdoor



California Water Action Plan

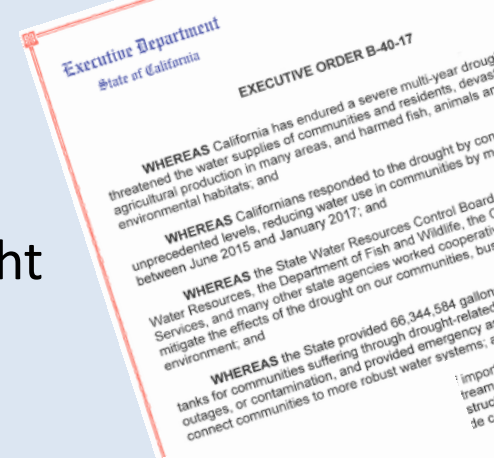
- **Roadmap** *for the state's journey toward sustainable water management*

Executive Orders B-37-16 & B-40-17

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

Framework Report & New Legislation

- Framework Report: April 2017
- Legislation AB 1668 & SB 606: May 31, 2018



Framework REPORT

Required by Executive Order B-37-16

Released April 2017

**Develop targets “Water Use Objectives”
based on standards for indoor, outdoor, and
commercial, industrial, institutional (CII)**

Achieve conservation greater than 20x2020

Better data (reporting)

AB1668 & SB606 Key Provisions

May 31, 2018 Signed by Governor

Water Use Objective & Efficiency Standards

- Establishes objective & standards for calculating objective
- Establishes a progressive enforcement approach
- Authorizes reporting regulation

Urban Water Management Planning

- New requirements for UWMPs and WSCPs

Agricultural Water Management Planning

- New requirements for AWMPs

Small Suppliers/Rural Community Planning

- Agency Recommendation

AB 1668 & SB 606 Focus Today

May 31, 2018 Signed by Governor

Water Use Objective & Efficiency Standards

Establishes residential indoor standard

Directs development and adoption of:

- Residential and CII outdoor standards
- Method to calculate objective
- Variances
- CII performance measures (PM)

Includes credit for potable reuse, i.e. bonus incentive

Establishes a progressive enforcement approach

Authorizes reporting regulation

Urban Water Use Objective =

Aggregate Residential Indoor Use

+

Aggregate Residential Outdoor Use

+

Aggregate CII Outdoor use

CII landscape areas with dedicated irrigation meters

+

Aggregate Water Loss

+

Aggregate Variances

+

Bonus Incentive for Potable Reuse

Up to 15% of objective

**Fiscal or
calendar
year**



A close-up photograph of a water faucet with water running from it. The water is clear and has small bubbles. The faucet is dark-colored. The background is a soft, out-of-focus light blue.

Urban Water Use Objective

Indoor Residential Use

Based on population and indoor standard

Aggregated for service area

- **55 GPCD (until 2025)**
- **No lower than 52.5 GPCD (2025-2030)**
- **No lower than 50 GPCD (2030+)**

Report to Legislature Jan 2021

- **Studies on indoor water use**

Urban Water Use Objective

Outdoor Residential Use

Landscape area x Eto x Landscape Standard

- Applies to irrigable lands
- Provisions for swimming pools, spas, water features

State is providing landscape area data
(by Jan 2021)

Studies and Pilots must be completed first

Urban Water Use Objective

(Commercial, industrial, & institutional = CII)

Outdoor CII Irrigation Water Use

CII landscape areas with dedicated irrigation meters

Incorporate principles of MWELO

Excludes commercial agricultural water

CII Performance Measures

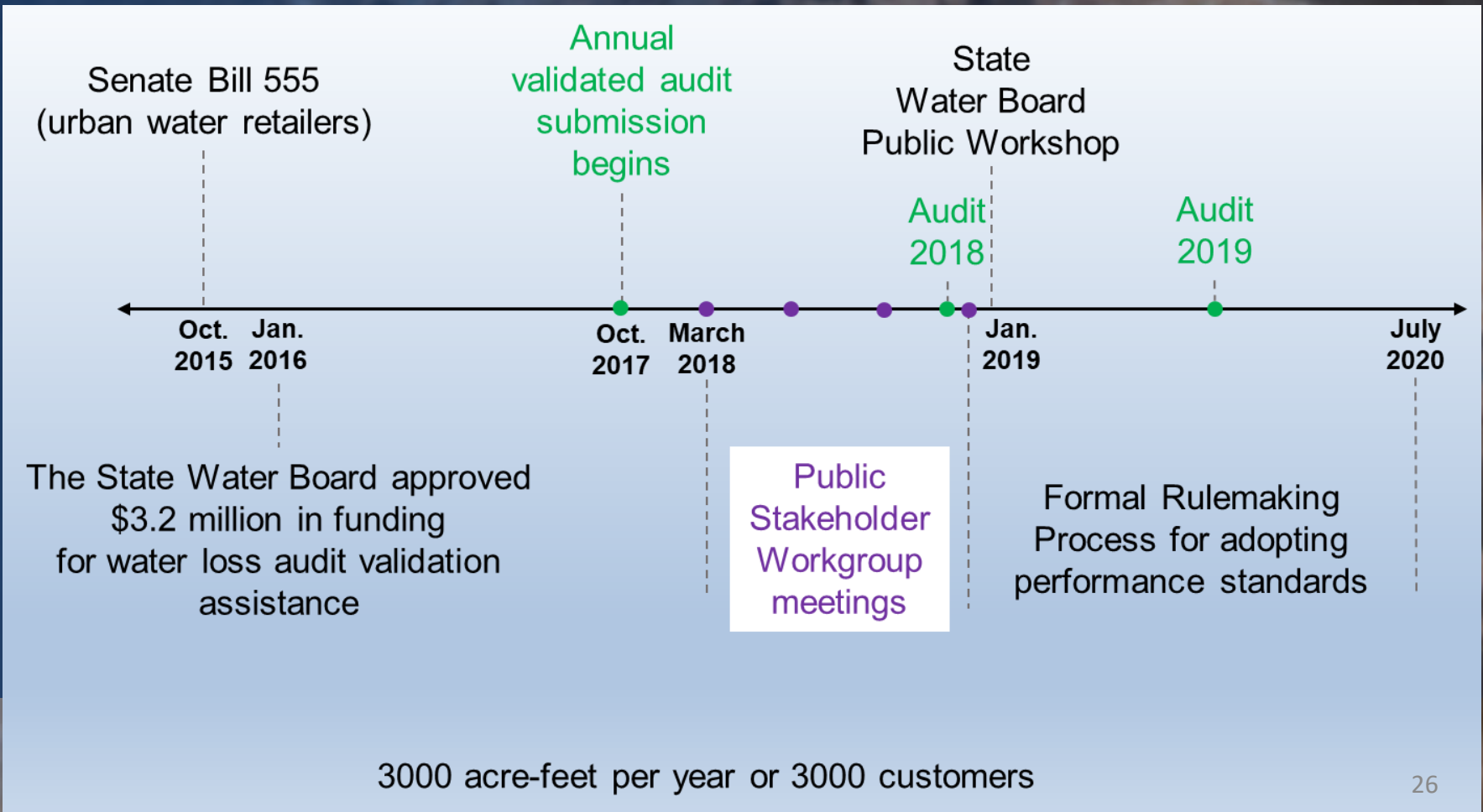
Urban Retail Suppliers Implement

Not volumetric, not part of water use objective

Water Loss STANDARDS

System Water Loss (SB 555)

Performance standards for a volume of water loss



2017 Water Loss Audits

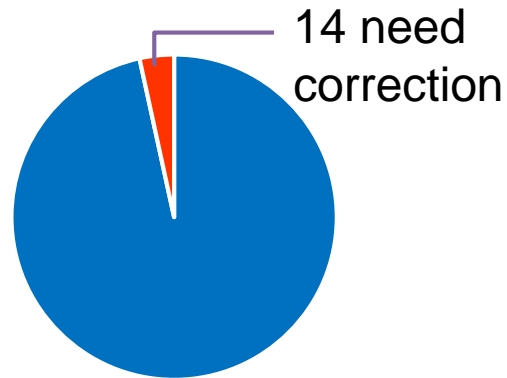


34 million people served



113,000 miles of mains

375 audits received



98% supply metered

14 need correction



4.9 million acre-feet supplied



8 million connections

35 gallons per connection per day

308,000 acre-feet of real losses

~ \$226 million in value

Efficiency Standards **TIMING**

2018



Begin
standard
development

2022



Adopt
standards, PMs,
and method

2023



Suppliers
calculate
objectives

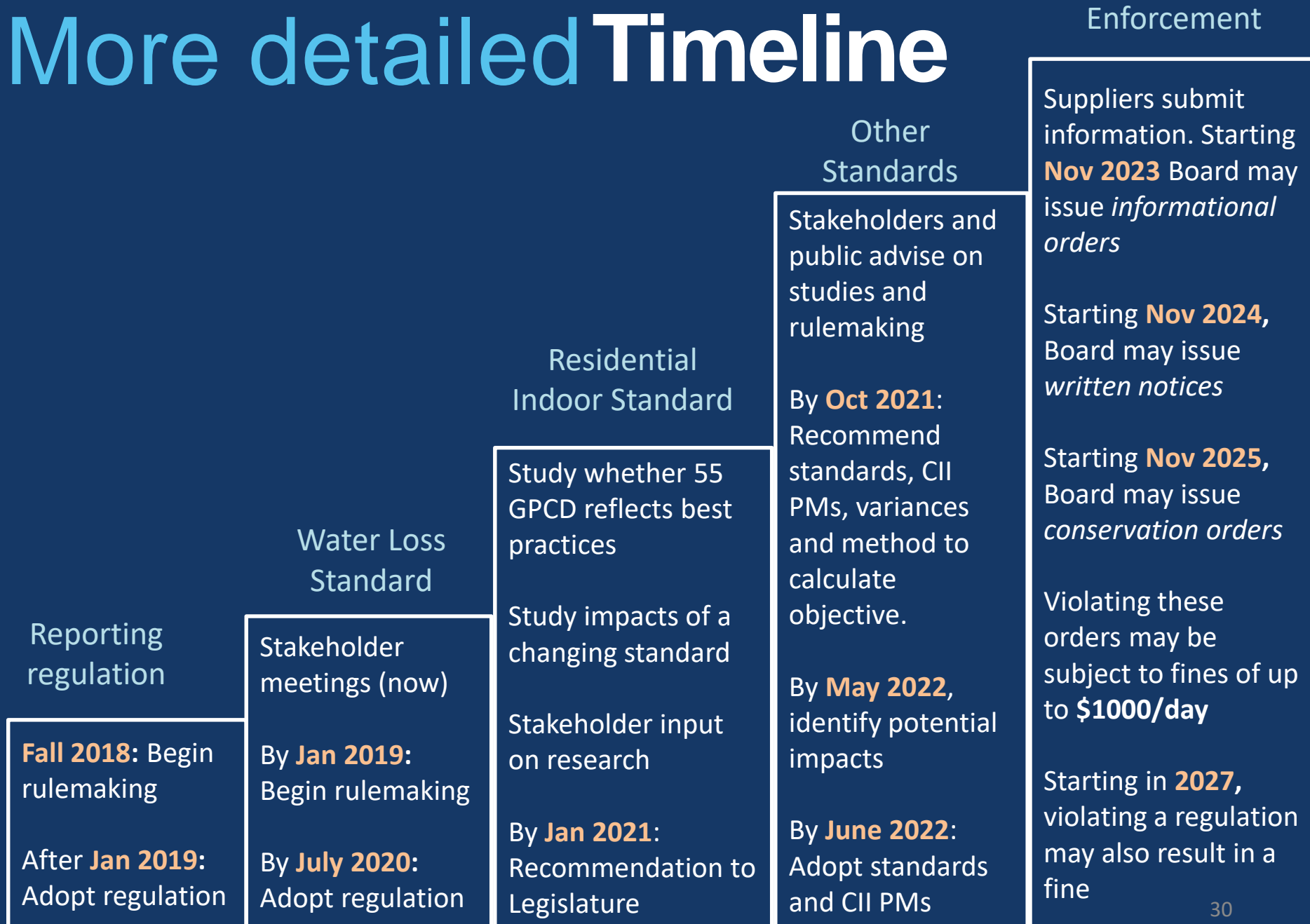
2027



All suppliers
reach
objectives

All standards adopted through regulatory process, taking input from industry leaders, stakeholders, and public

More detailed Timeline



Engaging Stakeholders

Water Loss Standard

- In progress through SB555, Board workshops in progress

Residential Outdoor Standard

- DWR workshops in progress

AB1668/SB606 general overview

- DWR and SWRCB Info and Listening Sessions, Sept 2018

Developing the standards, etc.

- Timing, format and process TBD

Adopting the standards

- Workshops and public comment opportunities as with any rulemaking

REPORTING

Suppliers report monthly production to the Board

DWR collects plan data (UWMPs, WSCPs, AWMPs)

Suppliers submit annual reports to DWR

Streamline reporting to Board and DWR

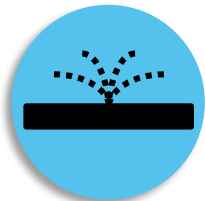
Local CONTROL



Rebates and Incentive Programs



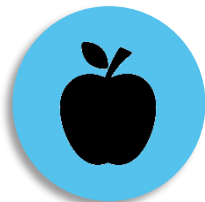
Conservation Rate Structures



Customer and System Leak Repair



Ordinances and Codes



Education and Outreach

COMPLIANCE

On Water Use Objective, not on standards

Aggregated, supplier scale; not individuals

Infinite pathways for local compliance

Suppliers can focus on whatever approach works best for them

State Water Board

Glide path enforcement (info orders, warning letters,
conservation orders)

Suppliers have until 2027 (9 years!) to hit their objectives
before possible penalties

Statewide Conservation True or False?

	True	False
The State will impose individual mandates for homeowners or businesses	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The indoor residential standard is per household	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Agricultural water users will expand their management plans	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AB 1668 and SB 606 together implement a key resiliency strategy	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Statewide Conservation TAKEAWAYS



- 1 Conservation is often most cost effective approach to extend or develop new supplies
- 2 Urban water suppliers calculate water use objectives using standards based on need
- 3 Suppliers locally determine how to best achieve objectives and manage supply (infinite approaches)
- 4 New approach is equitable and flexible!
- 5 Helps us prepare for future droughts and changing climate



Thank you

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Water Board

[www.waterboards.ca.gov/water_issues/
programs/conservation_portal/california
_statutes.html](http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/california_statutes.html)

DWR

[water.ca.gov/Programs/Water-Use-And-
Efficiency](http://water.ca.gov/Programs/Water-Use-And-Efficiency)