

California Water Action Plan

A 5-year Plan Towards Sustainable Water Management



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CWAP purpose: address ongoing water challenges & lay foundation for sustainable management

- CNRA, CalEPA, CDFA collaboration & leadership.
- Stakeholder outreach and input
- Three overarching goals: Reliability, restoration, and resilience
- 10 broad actions



10 Actions:

1. Make conservation a CA way of life.
2. Increase regional self-reliance/integration
3. Achieve the coequal Delta goals.
4. Protect and restore ecosystems.
5. Manage and prepare for dry periods.
6. Increase storage / improve GW management.
7. Provide safe water for all communities.
8. Increase flood protection.
9. Increase ops. and regulatory efficiency.
10. ID sustainable financing opportunities.



1st year strategy:

Drought response & foundation for sustainability

- Drought Task Force
- CWAP; State of Emergency; State Budget
- SB 103/104 developed and signed
- Executive Order re-doubling efforts
- Final State Budget
- Water Bond negotiations
- Groundwater policy



1st year strategy: Drought response & foundation for sustainability

Ongoing:

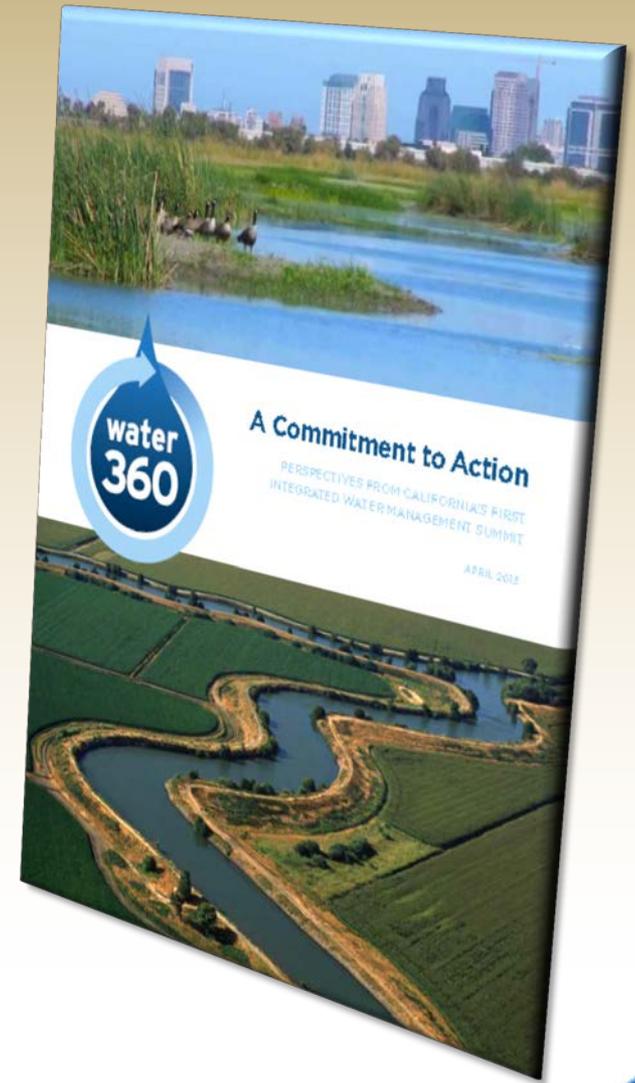
- Community assistance
- SB 103/104 & State Budget implementation
- Planning and budgeting for Year 2 & beyond



What State Water Leaders Are Saying

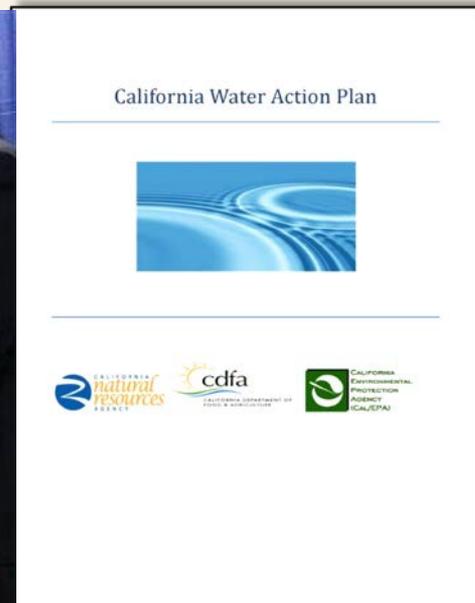
Outcomes from April 2013 Integrated Water Management Summit:

- Improve Alignment At All Levels of Government
- Establish Stable Financing
- Improve Planning Tools
- Improve Investment in Science
- Develop Methods for Tracking Progress Towards System Resiliency



State Actions

- Executive Order B-21-13: Streamline water transfers (May 2013)
- California Water Plan Update (draft Oct 2013)
- Drought Task Force Established (Dec 2013)
- Governor's Drought Proclamation and Water Action Plan (Jan 2014)



Aligning to the CWAP

Implementing the California Water Action Plan CWAP and Programs Interaction and Alignment

California Water Action Plan Defined Actions

Implementation Tracks	Finance	Water Reliability				Water Quality & Ecosystem		Flood	Delta	
	Action 10	Action 1	Action 2	Action 5	Action 6	Action 4	Action 7	Action 8	Action 3	Action 9
Statewide Planning/Finance	●	○	○	○	○	○	○	○	○	○
Data and Modeling	○	●	●	○	●	●	●	●	●	●
Drought/Conservation	○	●	●	●	○	●	○	●	●	○
Regional Sustainability and Groundwater Management	○	●	●	●	●	●	○	●	●	○
Regional Financial Planning and Assistance	●	○	○	○	○	●	○	●	○	●
<i>Water Quality/Safe Drinking Water*</i>										
<i>Watershed Restoration*</i>										
Flood System Improvement	○	●	●	●	○	○	●	●	●	●
Storage and Conveyance	○	●	●	●	●	○	○	●	●	●
Delta Improvements	○	●	●	○	●	●	○	●	●	●
State Facility Operations (SWP/SPFC)	○	●	●	○	○	●	●	●	○	●

*led by other agencies

Level of interaction & dependency: ● High ○ Medium ● Low



Action 1 - Increasing Water Conservation

Executive Order 1-17-2014

- Order #6 – Accelerate funding for water supply enhancement projects that can break ground this year

Executive Order 4-25-2014

- Order #5 - Require recipients of future financial assistance to have appropriate conservation and efficiency programs in place



Increasing Water Conservation: DWR's New Water-Energy Grant Program

- SB 103 authorized \$20M in annual grants
- Cap and Trade Greenhouse Gas Funds
- Applications due Dec 2014
- Awards: Spring 2015



The screenshot shows the website for the California Department of Water Resources (DWR). The header includes the CA.GOV logo, the text "CALIFORNIA DEPARTMENT OF WATER RESOURCES", and navigation links for HOME, NEWSROOM & EVENTS, ISSUES, and ABOUT US. A search bar is located in the top right corner. The main content area features a large blue banner with the text "Water-Energy Grant Program" and a background image of a green leaf with water droplets. Below the banner, there are sections for "What's New?" and "What is the Water-Energy Grant Program?". The "What's New?" section includes two entries: "Guideline/PSP: DWR has released the 2014 Water-Energy Grant Program Draft Guidelines and Proposal Solicitation Package." and "Schedule & Upcoming Events: DWR released the draft schedule for the Water- Energy Grant Solicitation and will conduct three public meetings in August to receive comments on the Draft document." The "What is the Water-Energy Grant Program?" section includes two paragraphs: "The Water-Energy Grant Program provides funds to implement water efficiency programs or projects that reduce greenhouse gas emissions, and reduce water and energy use." and "The funding for this program was approved by Governor on March 1, 2014 through Senate Bill 103, Section 11, which appropriated funds from the Greenhouse Gas Reduction Fund to the California Department of Water Resources to". On the right side of the page, there is a sidebar with a "Water-Energy Home" link, a "RESOURCES" section with links for "Solicitation", "Guidelines & PSP", "Schedule & Upcoming Events", "Public Comments", "Awards", and "Template & Forms", a "Grant Application Online Tool" link, a "Useful Links" section, and an "ARCHIVE" section with a link for "Archived Information".

Save Our Water Campaign

SB 103 infused \$1M into campaign for summer 2014



TAKE A POWER SHOWER...
Californians Don't Waste.

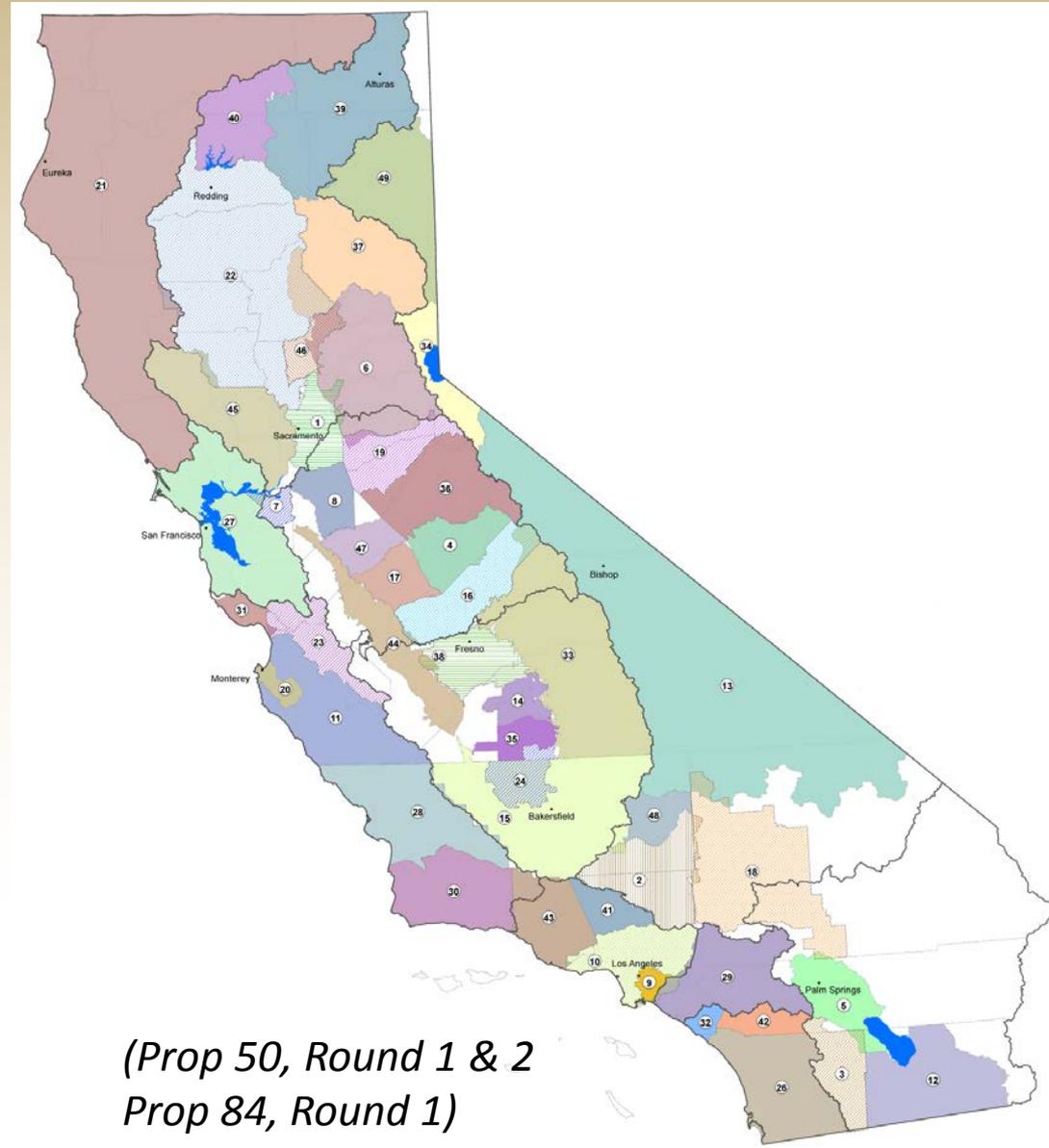


SaveOurH2O.org
#saveourwater

Action 2 - Increasing Regional Self-Reliance

Building on a Solid Base:

- 48 Regional Groups; 87% population
- 425 projects funded statewide
- \$577 million in State grant investments
- Leveraged by \$2.85 billion in local (non-State) cost match



*(Prop 50, Round 1 & 2
Prop 84, Round 1)*

Increasing Regional Self Reliance: Expedited Drought Funding

- SB 104 authorized \$200M in grants (Prop 84)
- Projects with drought nexus and high degree of readiness
- Awards: Fall 2015



January 18, 2013



January 18, 2014



Guidelines

2014 IRWM Drought Solicitation
Integrated Regional Water Management
Implementation Grant Program
Funded by Proposition 84

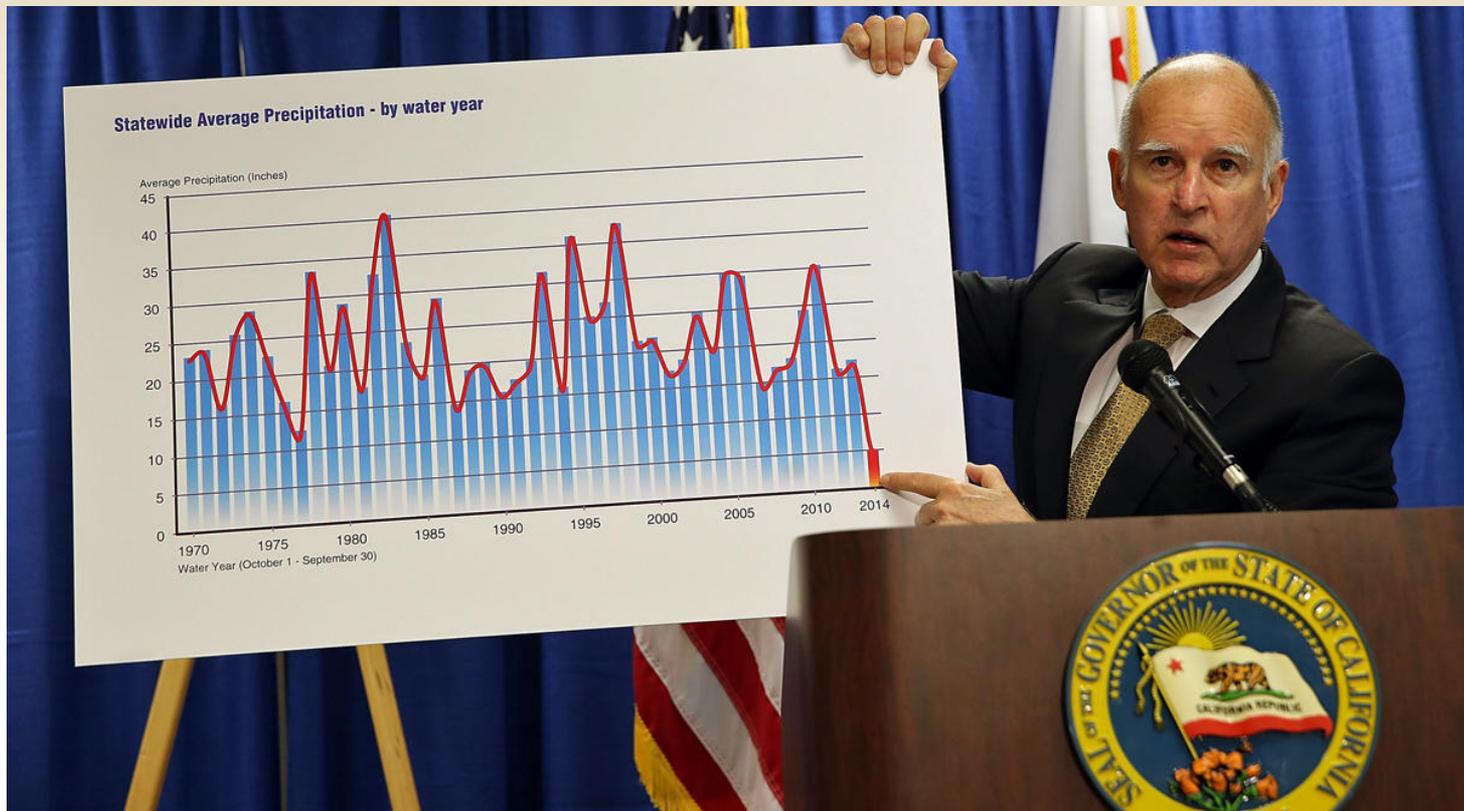


The Natural Resources Agency
Department of Water Resources
Division of Integrated Regional Water Management

June 2014

Action 5 - Managing and Preparing for Dry Periods

- Responding to third year of drought and Governor's Emergency Proclamations
- DWR is lead partner on Governor's Task Force



Most of CA in *Exceptional Drought Condition*

U.S. Drought Monitor California

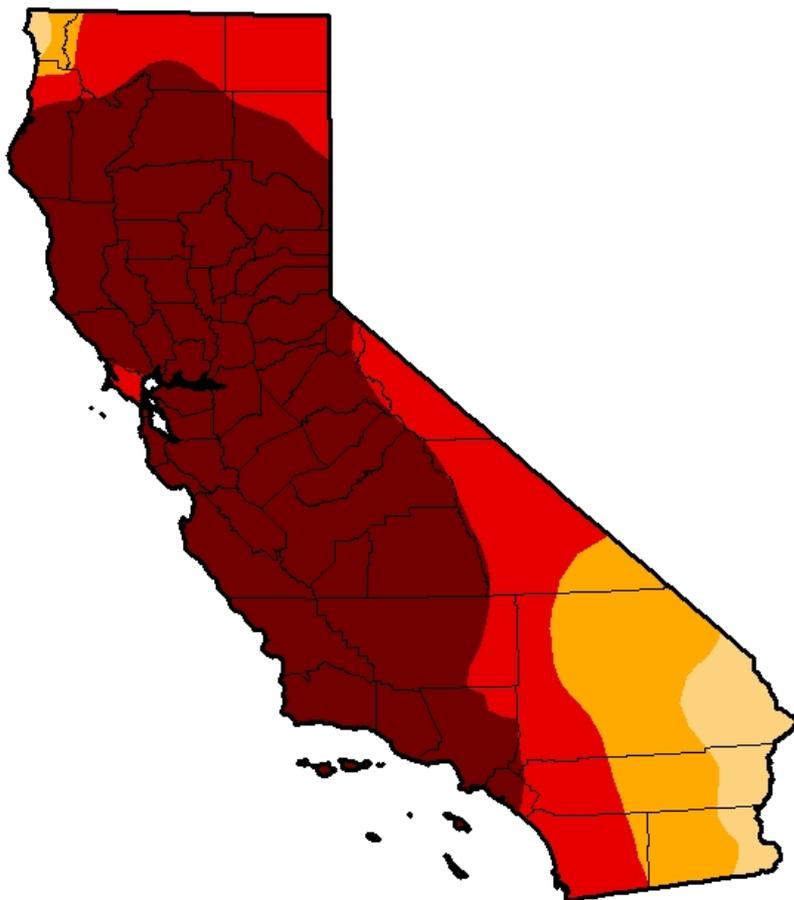
October 7, 2014

(Released Thursday, Oct. 9, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	95.04	81.92	58.41
Last Week 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
3 Months Ago 7/8/2014	0.00	100.00	100.00	100.00	78.97	36.46
Start of Calendar Year 12/31/2013	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 10/8/2013	2.52	97.48	95.95	84.12	11.36	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Mark Svoboda

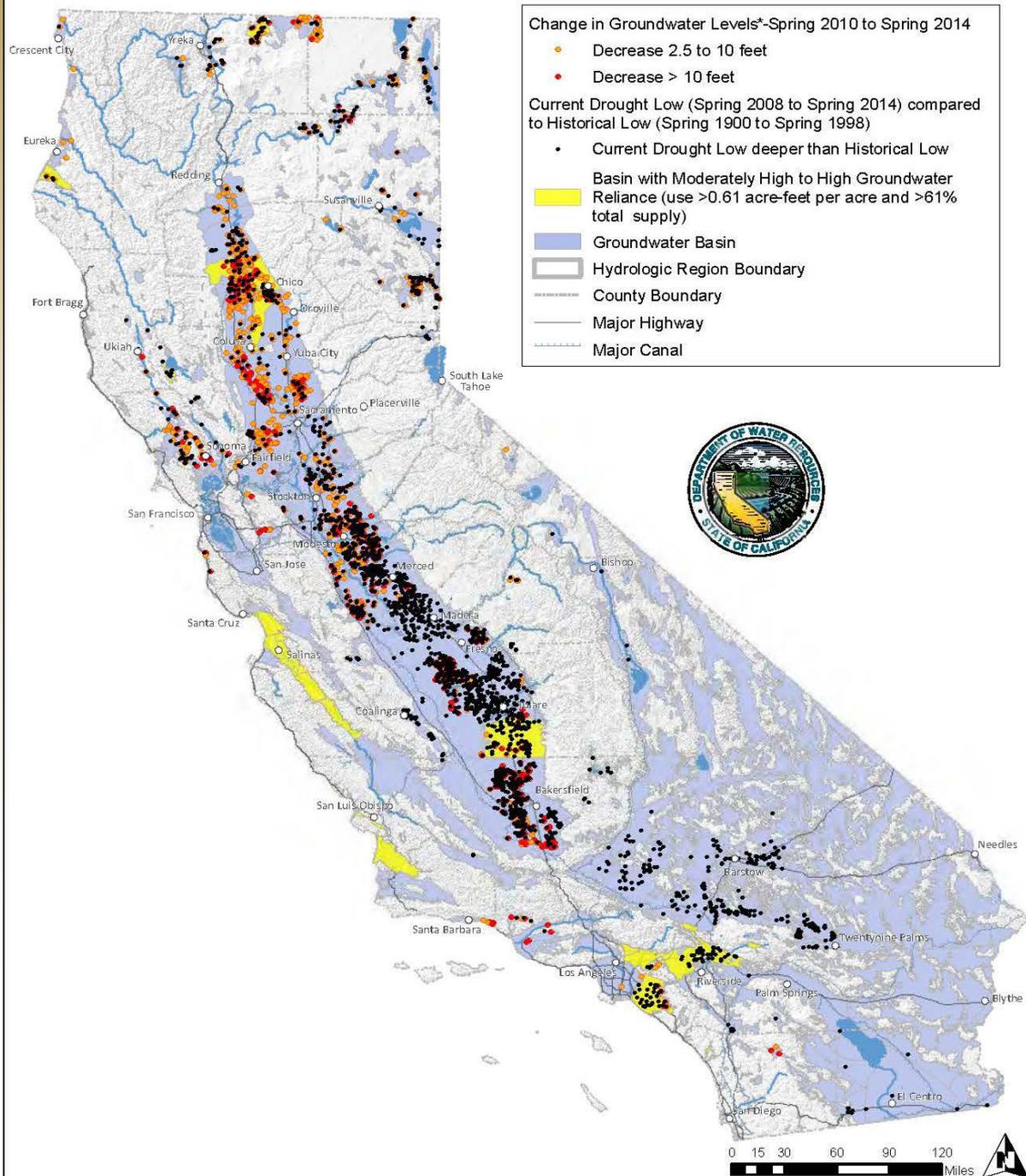
National Drought Mitigation Center



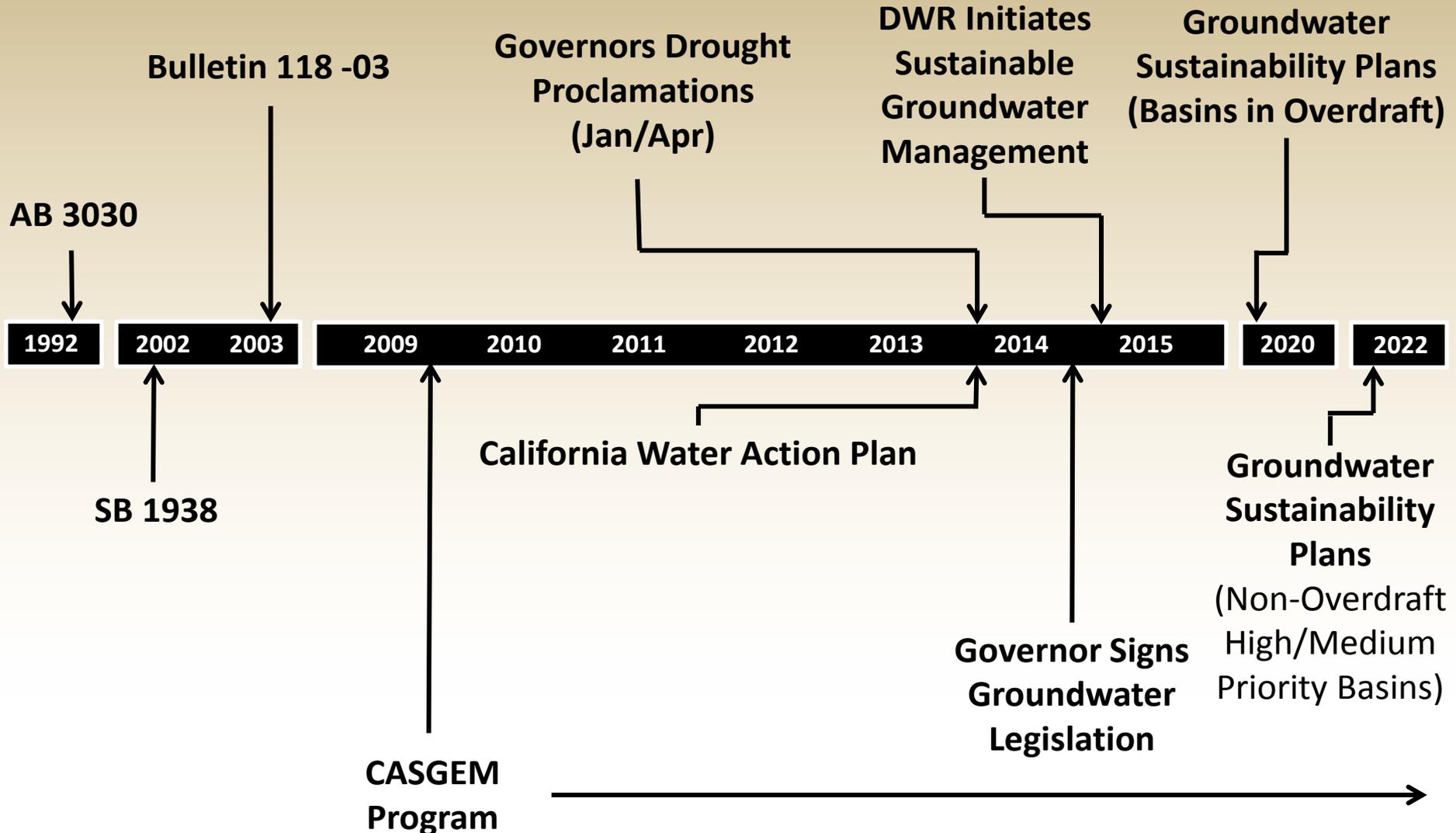
<http://droughtmonitor.unl.edu/>

Groundwater Conditions

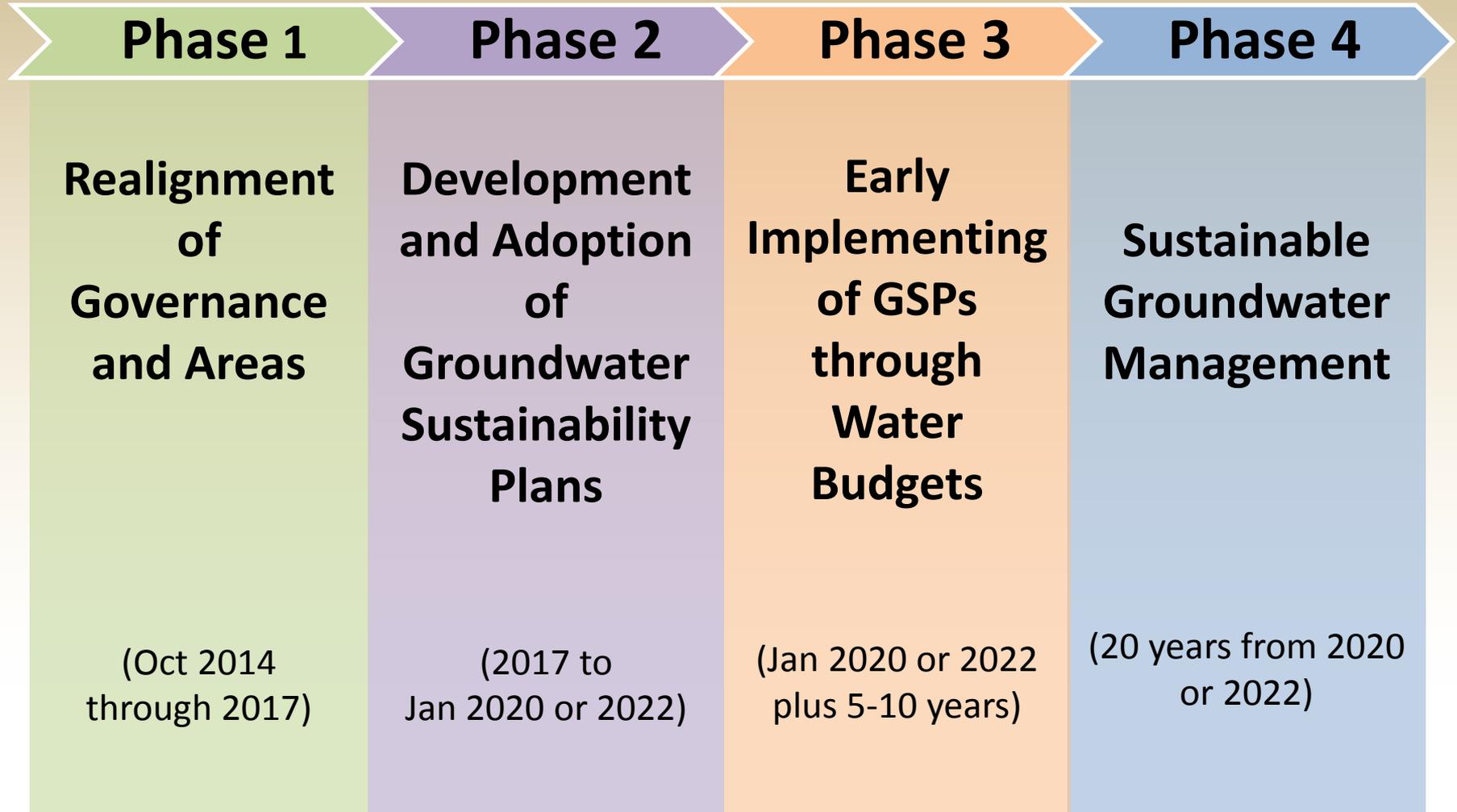
**Black Dots =
Groundwater Level
at Lowest Recorded**



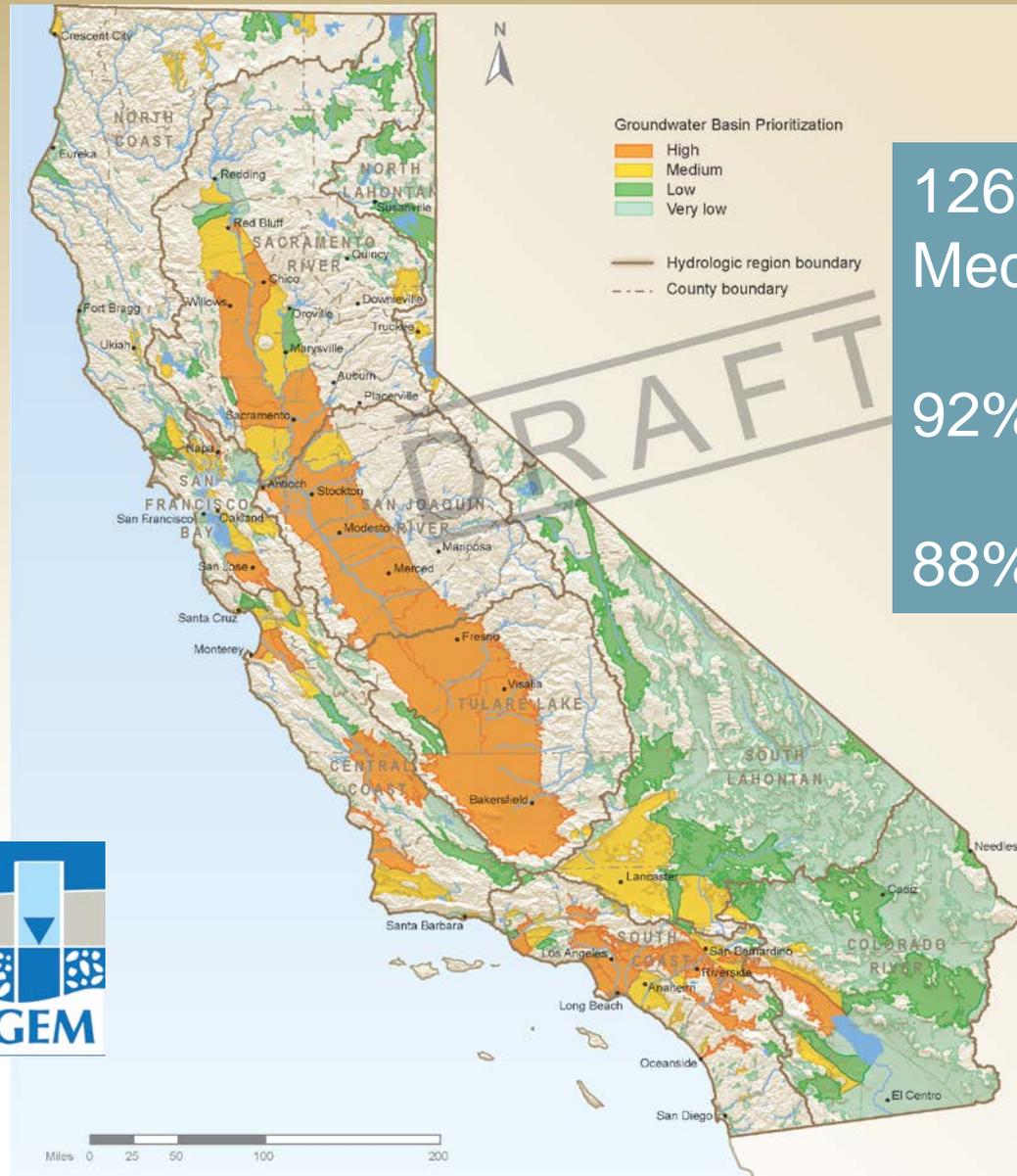
Action 6 - Sustainable GW Management (Major Historical Milestones)



Phases to Implement Groundwater Legislation and Achieve Sustainable Groundwater Management



CASGEM Basin Prioritization Results



126 High and Medium
92% GW use
88% Population



Phases to Implement Groundwater Legislation

Phase 1

Realignment of Governance and Areas

(Oct 2014 through 2017)

DWR

- Jan 2015 Update basin prioritization
- 2015 –2016 Identifies basins subject to critical conditions of overdraft
- Jan 2016 Adopt regulations to revise basin boundaries
- Jun 2016 Adopt regulations for evaluating and implementing GSPs
- Jun 2016 Adopt regulations for evaluating alternatives to GSPs
- Dec 2016 Publish report on water available for GW replenishment
- Jan 2017 Publish BMPs for sustainable GW management
- 2017 Publish Bulletin 118 “Interim Update”
- 2018 Publish Bulletin 160 Update

Phases to Implement Groundwater Legislation

Phase 2

Development and Adoption of Groundwater Sustainability Plans

(2017 to Jan 2020 or 2022)

SWRCB

- Jan 2018 Develop interim plans for “probationary basins”
- Jan 2020 May designate critically-overdrafted basins as “probationary” if GSP inadequate.
- Jan 2021 May develop interim plans for critically overdrafted “probationary basins”

DWR

- 2020 Publish Bulletin 118 “Comprehensive Update”

GSA’s

- Jan 2020 Manage high and medium priority basins identified subject to critical conditions of overdraft under a GSP
- Jan 2022 All other high & med. priority basins managed under a GSP

Phases to Implement Groundwater Legislation

Phase 3

Early Implementing of GSPs through Water Budgets

(Jan 2020 or 2022 plus 5-10 years)

GSA's

- Annually Report on progress towards sustainability to DWR (April 1st of each year)

SWRCB

- Jan 2025 May designate a basin as “probationary” if:
 - GSP inadequate
 - Implementation inadequate
 - Extractions result in significant depletion of interconnected surface waters

Phases to Implement Groundwater Legislation

Phase 4

Sustainable Groundwater Management

(plus 20 years from 2020 or 2022)

DWR/SWRCB

- Board and DWR continue to Evaluate GSPs effectiveness

GSA's

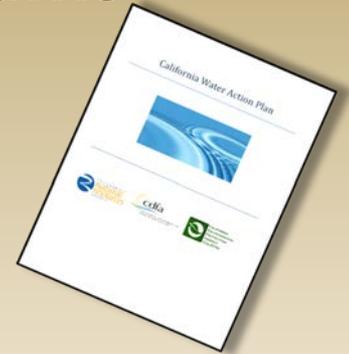
- Adjust GSPs as needed

Overall

- 2040 and 2042 – Twenty years after GSP adoption all high and medium priority groundwater basins must achieve sustainability.

DWR Groundwater Management Program:

Integrating Recent Actions and Programs

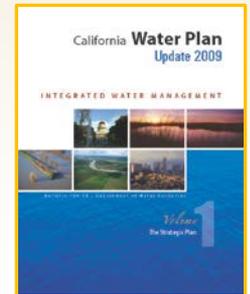


- CA Water Action Plan
- Sustainable Groundwater Management Act
- AB3030, SB1938, CASGEM

• Bulletin 118



• Bulletin 160



• Integrated Regional Water Management

Sustainable Groundwater Management Elements by Functional Area

Sustainable Groundwater Management

Groundwater Sustainability Assessment

Basin Groundwater Budget

Basin Boundaries, Prioritization, and Budget

GSP Assessment

State Technical Assistance

Groundwater Management Information System

Statewide Data Collection

Groundwater Evaluations

State Planning Assistance

Statewide Groundwater Planning (B-118)

Statewide Water Planning (B-160)

Recharge/Supply Planning

Financial & Regional Planning Assistance

Regional Agency Capacity Assistance

Financial Assistance

Statewide-Regional Integration

Interregional Assistance

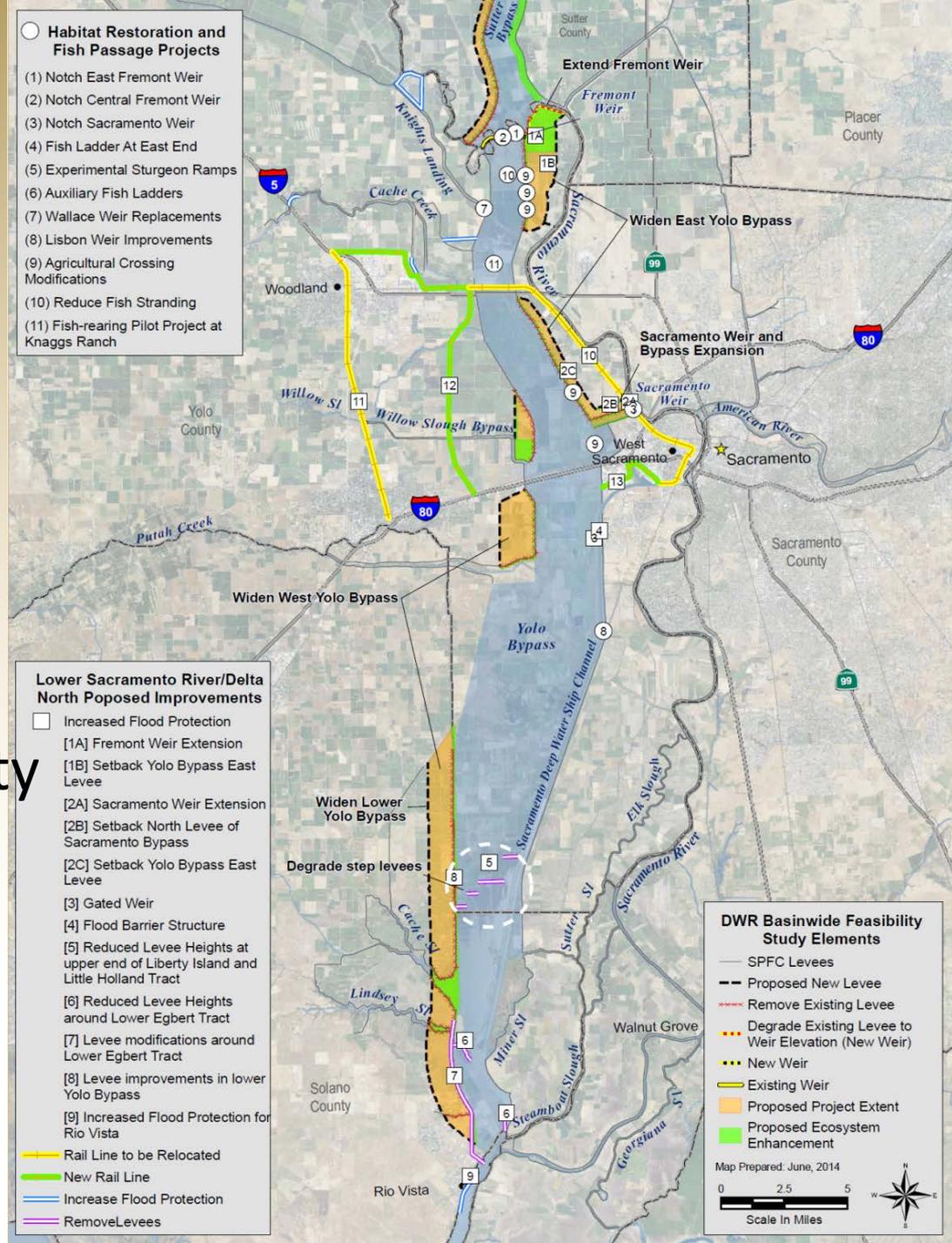
Evaluate Storage & Conveyance Projects

Improve Surface Water Reliability

Assess Surface Water & Groundwater Interaction

Action 8 - Flood Management

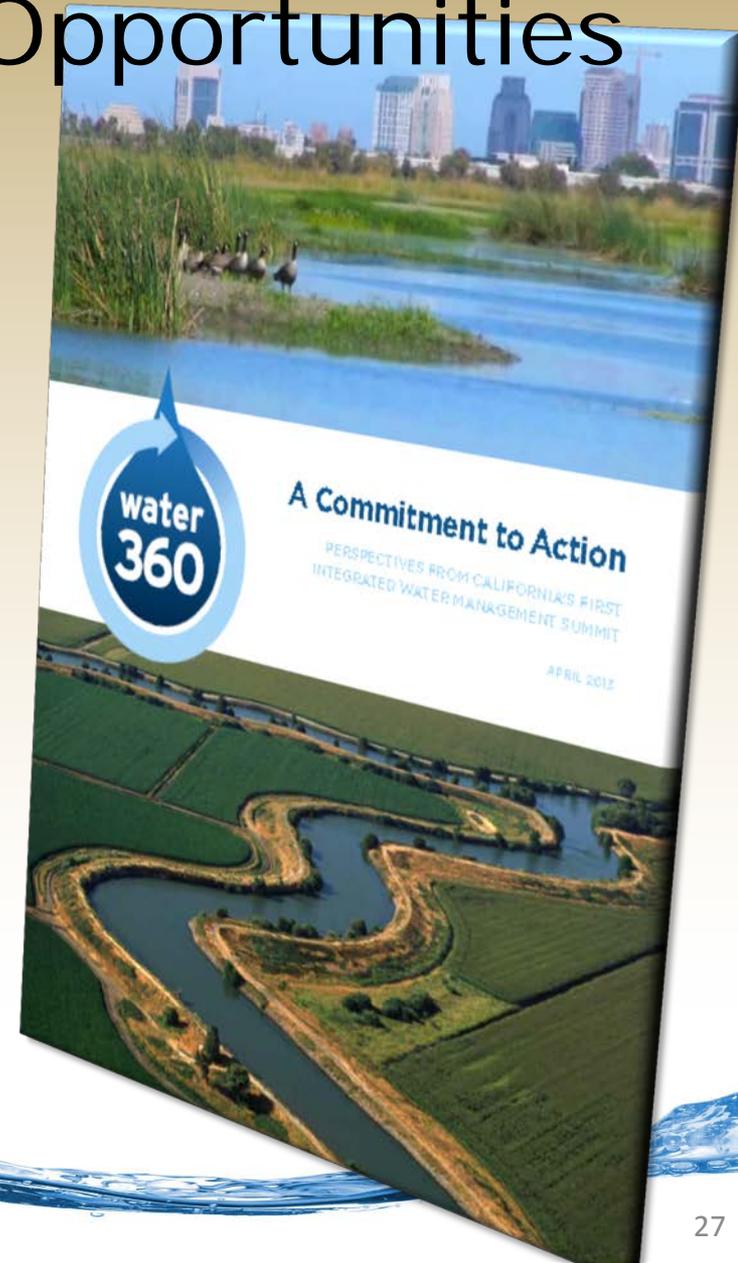
- Protect small communities
- Increase bypass capacity
- Enlarge openings to bypasses and decrease water elevation
- Restore habitat



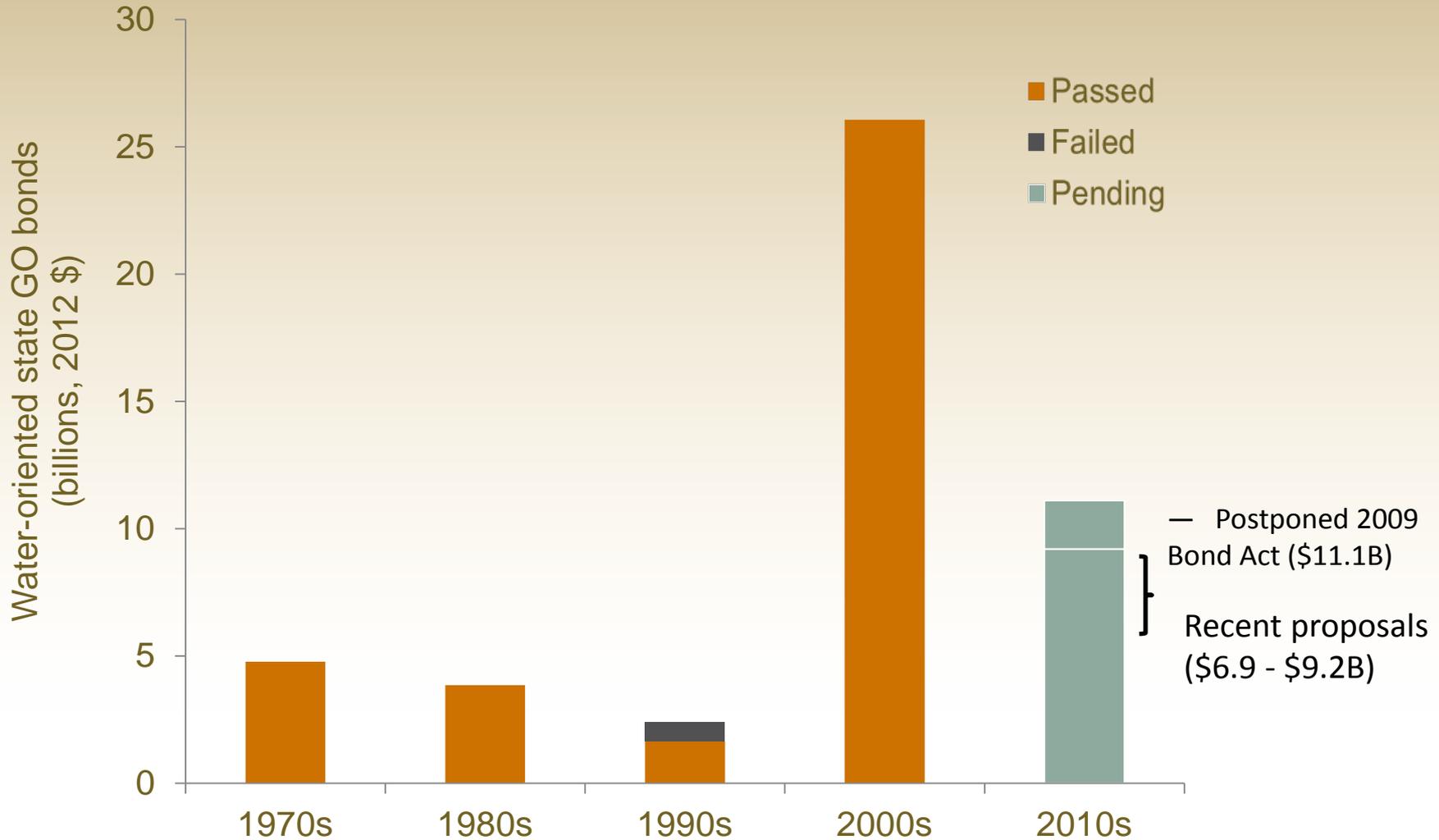
Action 10 – Identify Sustainable & Integrated Financing Opportunities

What Water Leaders are saying:

- Establish **stable financing**
- **Improve alignment** at all levels of government
- Improve investment in science
- **Measure and track progress** towards system resiliency
- Improve planning tools

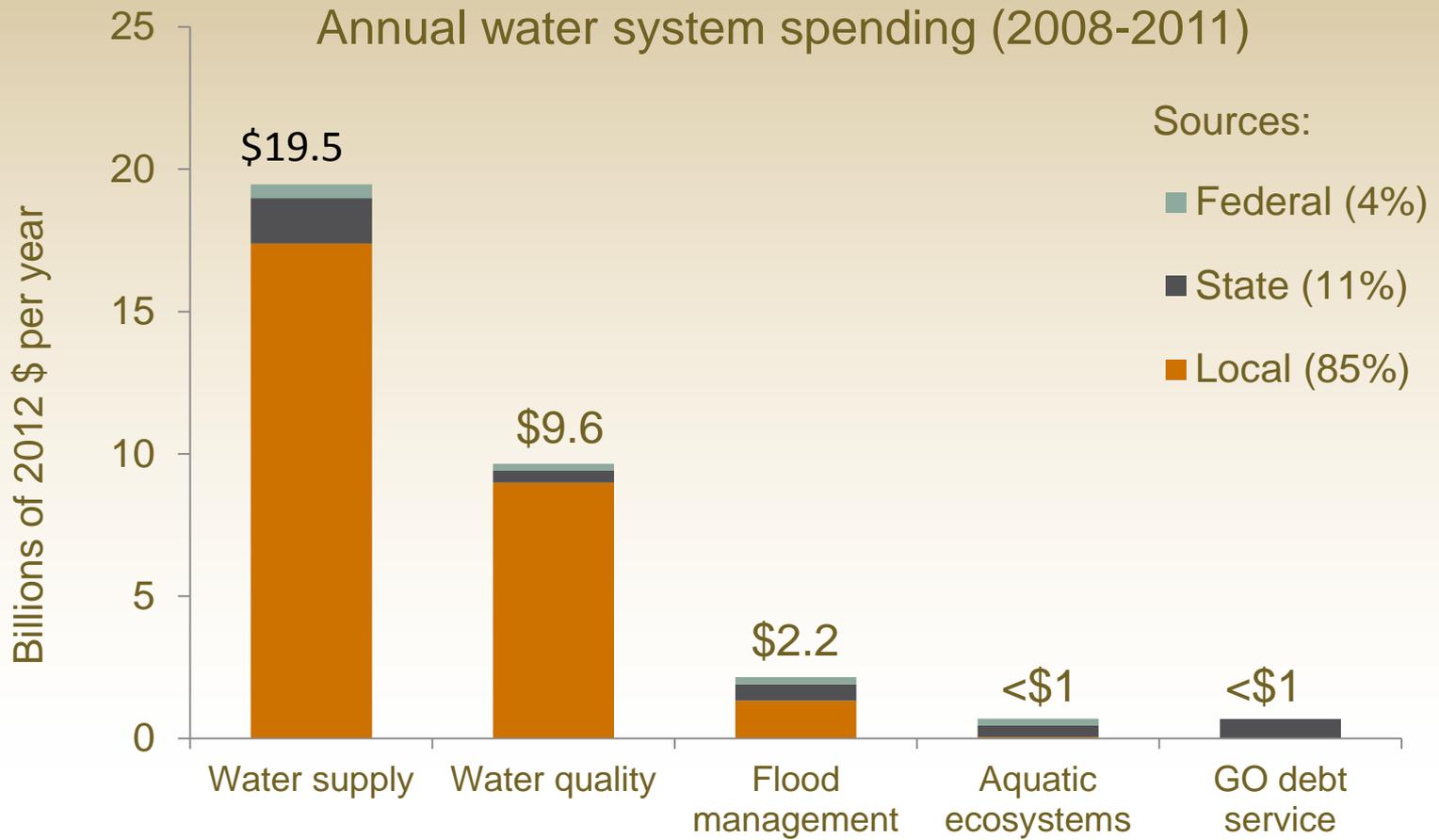


State GO water bonds have grown significantly since the early 2000s



Source: PPIC 2014 (Governor's Budgets)

But local agencies raise most of the \$30+ billion spent annually



Source: PPIC 2014 (Governor's Budgets)

We face debilitating funding gaps

	Overall grade	Annual gap (\$ millions)
Urban water supply	Passing (mostly)	—
Urban wastewater	Passing (mostly)	—
Safe drinking water (small rural systems)	Failing	\$30–\$160
Flood protection	Failing	\$800–\$1,000
Stormwater management	Failing	\$500–\$800
Aquatic ecosystem management	Failing	\$400–\$700
Integrated management	On the brink	\$200–\$300

Total Annual Gap: \$2–\$3 Billion

Source: PPIC 2014

Past Public Finance Investments Relative to Water Action Plan Priorities

Past Investments Relative to Current CA Water Management Priorities

Funding (\$ million)

Historical Finance Categories	CA Water Action Plan	Prop. 204 1996	Prop. 13 2000	Prop. 50 2002	Prop. 84 2006	Prop. 1E 2006	Totals
Water Reliability	1. Make conservation a California way of life	\$60	\$105	\$200	\$180		\$545
	2. Increase regional self-reliance and integrated water management across all levels of government	\$60	\$478	\$855	\$1,000	\$300	\$2,693
	5. Manage and prepare for dry periods						\$0
	6. Expand water storage capacity and improve groundwater management	\$40	\$262	\$50			\$352
Water Quality and Ecosystem Restoration	4. Protect and restore important ecosystems	\$442	\$556	\$1,550	\$2,638		\$5,186
	7. Provide safe water for all communities	\$140	\$70	\$715	\$380		\$1,305
Flood Management	8. Increase flood protection	\$85	\$249	\$70	\$800	\$3,790	\$4,994
Delta Management and Operation	3. Achieve the co-equal goals for the Delta	\$168	\$250		\$325		\$743
	9. Increase operational and regulatory efficiency						\$0
	10. Identify sustainable and integrated financing opportunities				\$65		\$65
TOTALS		\$ 995	\$ 1,970	\$ 3,440	\$ 5,388	\$ 4,090	\$ 15,883



Water Bond

Historical Finance Categories	CA Water Action Plan	Prop 1
Water Reliability	1. Make conservation a California way of life	0.100
	2. Increase regional self-reliance and integrated water management across all levels of government	1.235
	5. Manage and prepare for dry periods	0
	6. Expand water storage capacity and improve groundwater management	2.800
Water Quality and Ecosystem Restoration	4. Protect and restore important ecosystems	1.4075
	7. Provide safe water for all communities	1.520
Flood Management	8. Increase flood protection (<i>\$295M to Delta, \$100M statewide</i>)	0.395
Delta Management and Operation	3. Achieve the co-equal goals for the Delta	0.0875
	9. Increase operational and regulatory efficiency	0
Sustainable Financing	10. Identify sustainable and integrated financing opportunities	0
	TOTAL	\$7.5 B

Putting the State Water Plans in Context



CA Water Plan Update

- Long Term
- Comprehensive

CA Water Action Plan

- 5-Year
- Current Administration's Priorities

CWP Update 2013 Themes: Integrate, Align and Invest

Themes of 2013 California Water Plan

Integrated water management provides a set of principles and practices that include government agency alignment through open and transparent planning process. This leads to stakeholder and decision-maker support for investment ... in innovation and infrastructure.

Integrated Water Management

System flexibility and resiliency
Advocacy from implementers and financiers
Delivery of benefits using fewer resources

Government Agency Alignment

Clarification of state roles
Reduction in implementation time and costs
Efficient achievement of multiple objectives

Investment in Innovation and Infrastructure

Stable and strategic funding
Priority-driven funding decisions
Equitable and innovative finance strategies

Promoting the Value of Integrated Water Management

PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

Public Safety

- Making communities safe
- Planning ahead to achieve best collaboration
- Emergency planning and response

Environmental Stewardship

- Helping ecosystems thrive
- Creating healthier communities by enhancing the environment
- Responsible and reasonable balance between protecting people and the environment

Economic Stability

- Providing for our families' future
- Protecting businesses and investments
- Enhancing communities