



Managing Water Resources for Sustainability State Initiatives and Plans

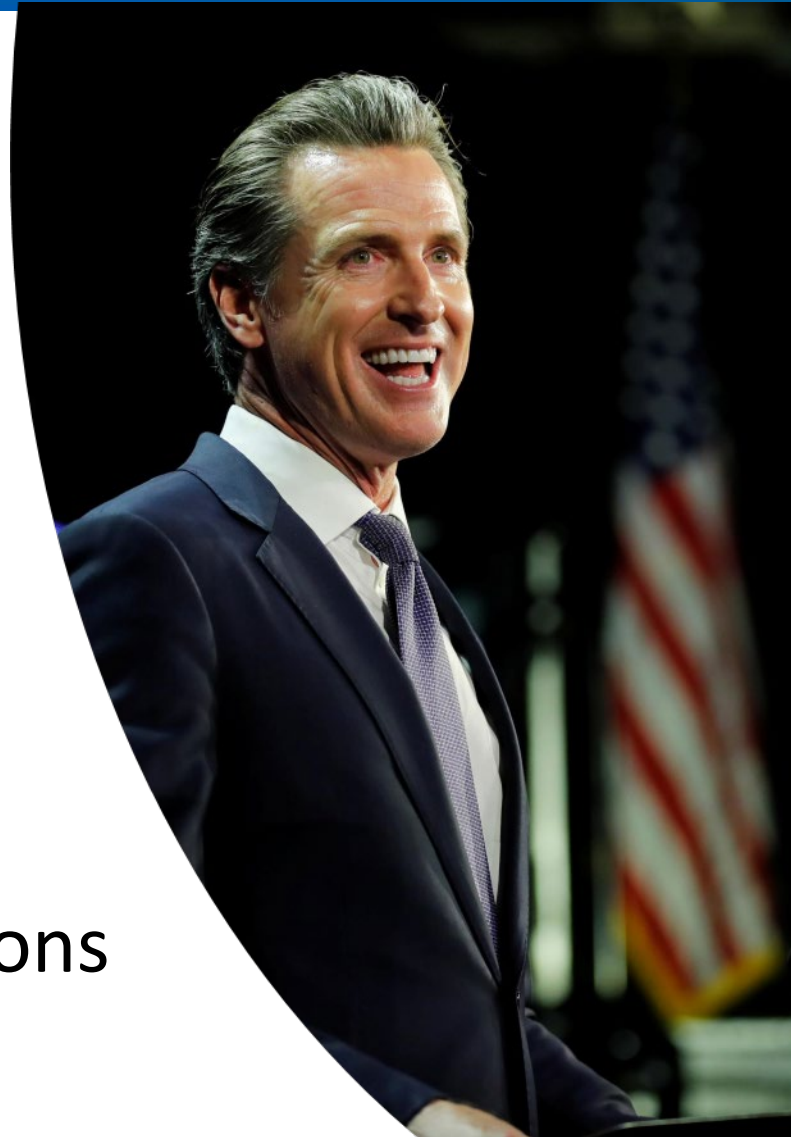
**Central Coast Sustainability Summit
October 16, 2019**



Governor Newsom's Water Resilience Portfolio Executive Order for Multi-Agency Assessment & Actions

- Reassess Water Action Plan Priorities
- Update Climate Change Impacts
- Set Portfolio Priorities
- Integrate Actions Across Agencies

- ❖ Inventory & Assessments
- ❖ Stakeholder Engagement
- ❖ Resilience Portfolio of Actions



Principles for Preparing Water Resilience Portfolio



- ❖ **Prioritize** - *multi-benefit approaches* that meet multiple needs at once
- ❖ **Utilize** - *natural infrastructure* such as forests and floodplains
- ❖ **Embrace** - *innovation and new technologies*
- ❖ **Encourage** - *regional approaches* in watersheds
- ❖ **Incorporate** - *successful approaches* from other parts of the world
- ❖ **Integrate** - *investments, policies and programs* across state government
- ❖ **Strengthen Partnerships** - *with local, federal and tribal governments, water agencies and irrigation districts, and other stakeholders*

Water Resilience Portfolio



STATE OF CALIFORNIA
WATER RESILIENCE
PORTFOLIO INITIATIVE



About



Inventory and Assessment



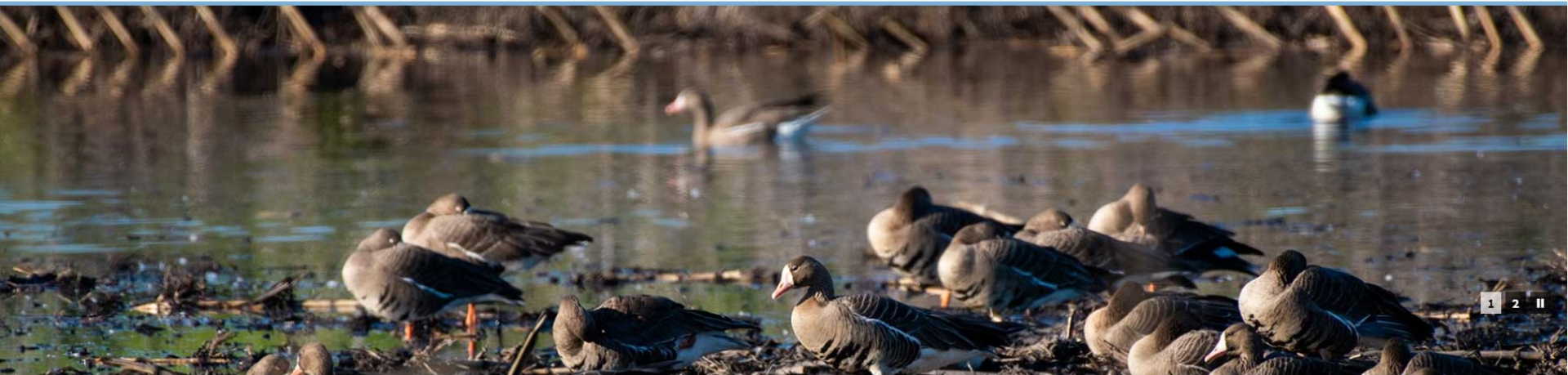
Public Engagement



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About the Water Resilience Portfolio

Governor Gavin Newsom signed an [executive order](#) in April 2019 directing three state agencies to develop a comprehensive strategy to build a climate-resilient water system and ensure healthy waterways through the 21st century.

The order directs the secretaries of the California Natural Resources Agency, the California Environmental Protection Agency and the California Department of Food and Agriculture to identify and assess a suite of complementary actions to ensure safe and resilient water supplies, flood protection and healthy waterways for the state's communities, economy and environment. The portfolio will integrate and build on programs, policies and investments already in place to create a climate-resilient water system.

▶ [Why Do We Need a Resilience Portfolio?](#)

▶ [What Happens Next?](#)



Public Engagement and Outreach

How can we meet the water needs of California's communities, economy, and environment for generations to come? Email us your ideas at input@waterresilience.ca.gov.

- [Public Engagement Calendar](#)
- [Sign up for the Water Resilience Portfolio News List Serve](#)



Contact

Message from CNRA Secretary Wade Crowfoot

- ❖ CA water management is a grand exercise in partnerships.
- ❖ Update 2018 is a key tool for strengthening partnerships.
- ❖ Update 2018 has important role to inform Water Resilient Portfolio.
- ❖ State prioritizes “thinking long” on water solutions & investments to strengthen water systems with multi-benefit projects.



Message from DWR Director Karla Nemeth

- ❖ Recent extreme events causing volatility & uncertainty in CA hydrology.
- ❖ New climate reality -- must work statewide with innovative solutions & local partnerships in everything we do.
- ❖ Abundant expertise at local & regional levels.
- ❖ Update 2018 recommends policies & technical support for regional actions in watersheds, groundwater basins & communities.
- ❖ Implementing Update 2018 recommendations will be coordinated with Water Resilient Portfolio.



California Water Plan Update 2018

Highlights



Chapter 1: California Water Today

Conditions assessment – status, trends, initiatives & investments

Chapter 2: Challenges to Sustainability

Understanding sustainability and critical, systemic & institutional challenges

Chapter 3: Actions For Sustainability

Recommended actions for the next 5 to 50 years

Chapter 4: Investing in Water Resources Sustainability

Implementation cost, funding mechanisms, and funding scenarios

29 Supporting Documents & 49 Companion State Plans

California Water Today

Conditions Assessment

❖ Setting the Context for Update 2018

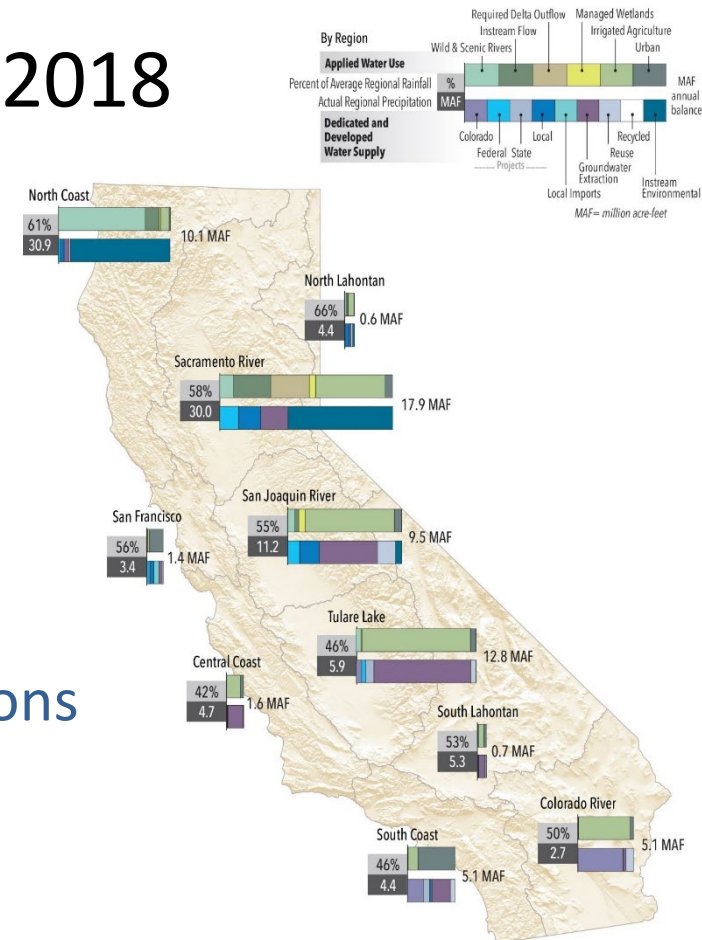
- Unprecedented multi-year drought
- 2nd wettest year on record

❖ Diverse Water Supplies & Uses

- Water balances 2011 - 2015

❖ State Initiatives & Investments

- Water Action Plan & related State actions
- Propositions 1 and 68

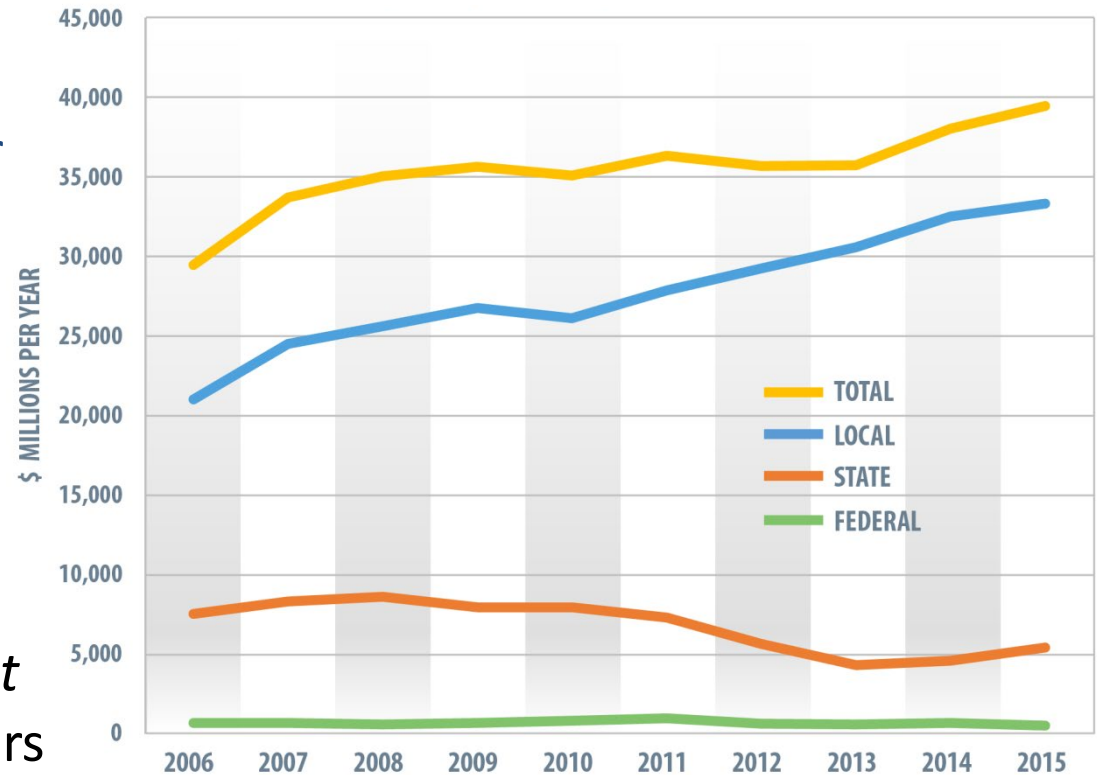


California Water Today

Historical Investment in Water

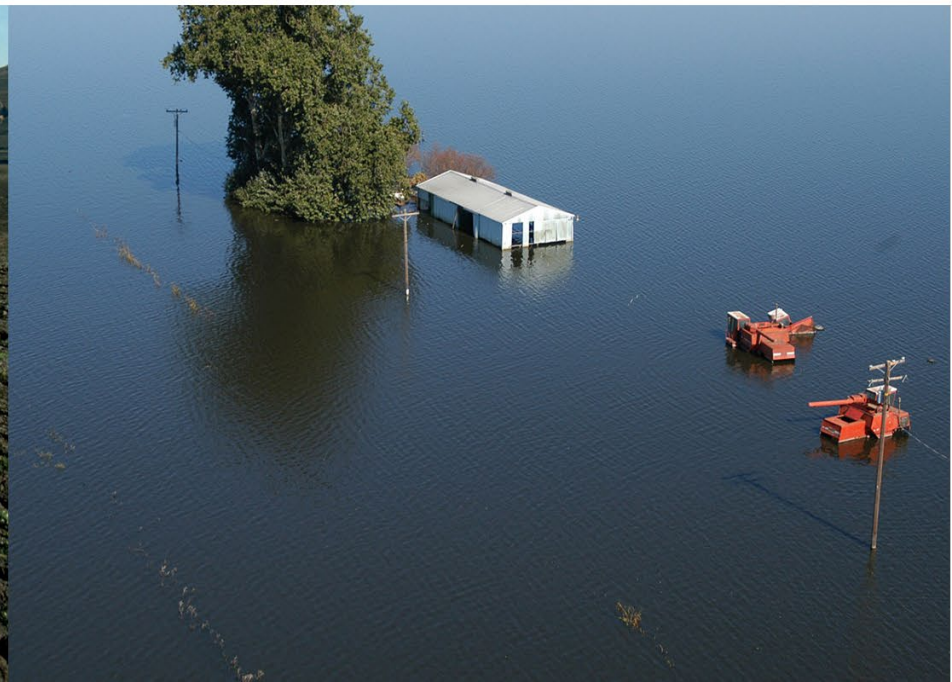
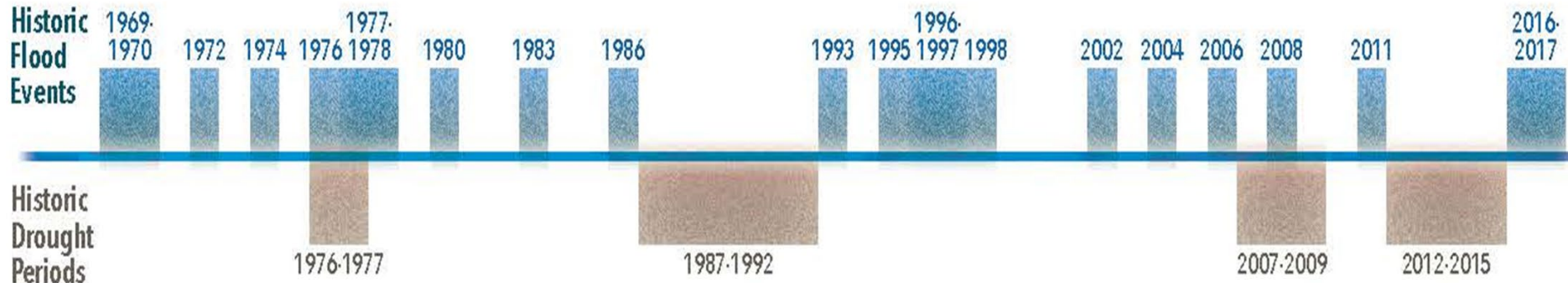
- ❖ State expends ~ \$2 Billion/year on water management
- ❖ State allocates only 2% of State General Fund for water
- ❖ 80% of investment from Local/regional entities
- ❖ 75% for ongoing costs
- ❖ Investment backlog is *at least* \$350 Billion over next 50 years

Total Capital and Ongoing IWM Expenditures



California Water Management

A Tale of Extremes



Challenges to Sustainability Threaten the People & Ecosystems of CA

- ❖ Greater Drought Impacts - Unreliable Water Supplies
- ❖ Increasing Flood Risk
- ❖ Groundwater Depletion & Subsidence
- ❖ Degraded Water Quality
- ❖ Declining Environmental Conditions
- ❖ Aging Infrastructure
- ❖ Climate Change Impacts

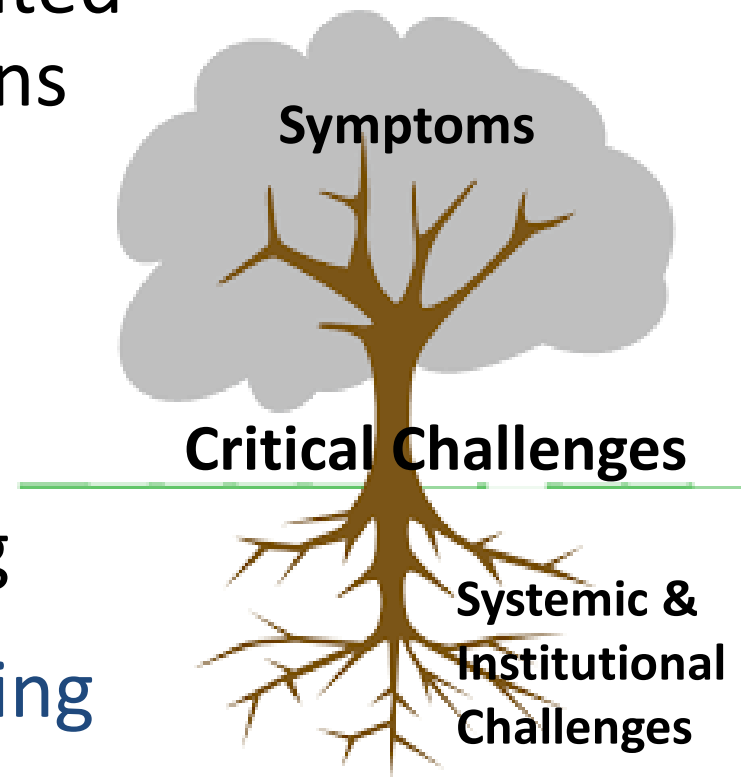


Low water level at Folsom Lake (January 2014)

Systemic & Institutional Challenges

Overcoming them Increases Return on Investment

- ❖ Fragmented and uncoordinated decisions, initiatives & actions
- ❖ Inconsistent, inflexible, & conflicting regulations
- ❖ Insufficient capacity for data-driven decision-making
- ❖ Insufficient & unstable funding
- ❖ Inadequate performance tracking



6 Sustainability Goals & 19 Rec'd Actions To Overcome Challenges

1. **Improve Integrated Watershed Management**
2. Strengthen Infrastructure Resiliency & Operational Flexibility
3. Restore Critical Ecosystem Functions
4. Empower Under-Represented & Vulnerable Communities
5. Improve Agency Alignment & Address Persistent Regulatory Challenges
6. Support Decision-making, Adaptive Management & Long-term Planning

Update 2018 Innovations

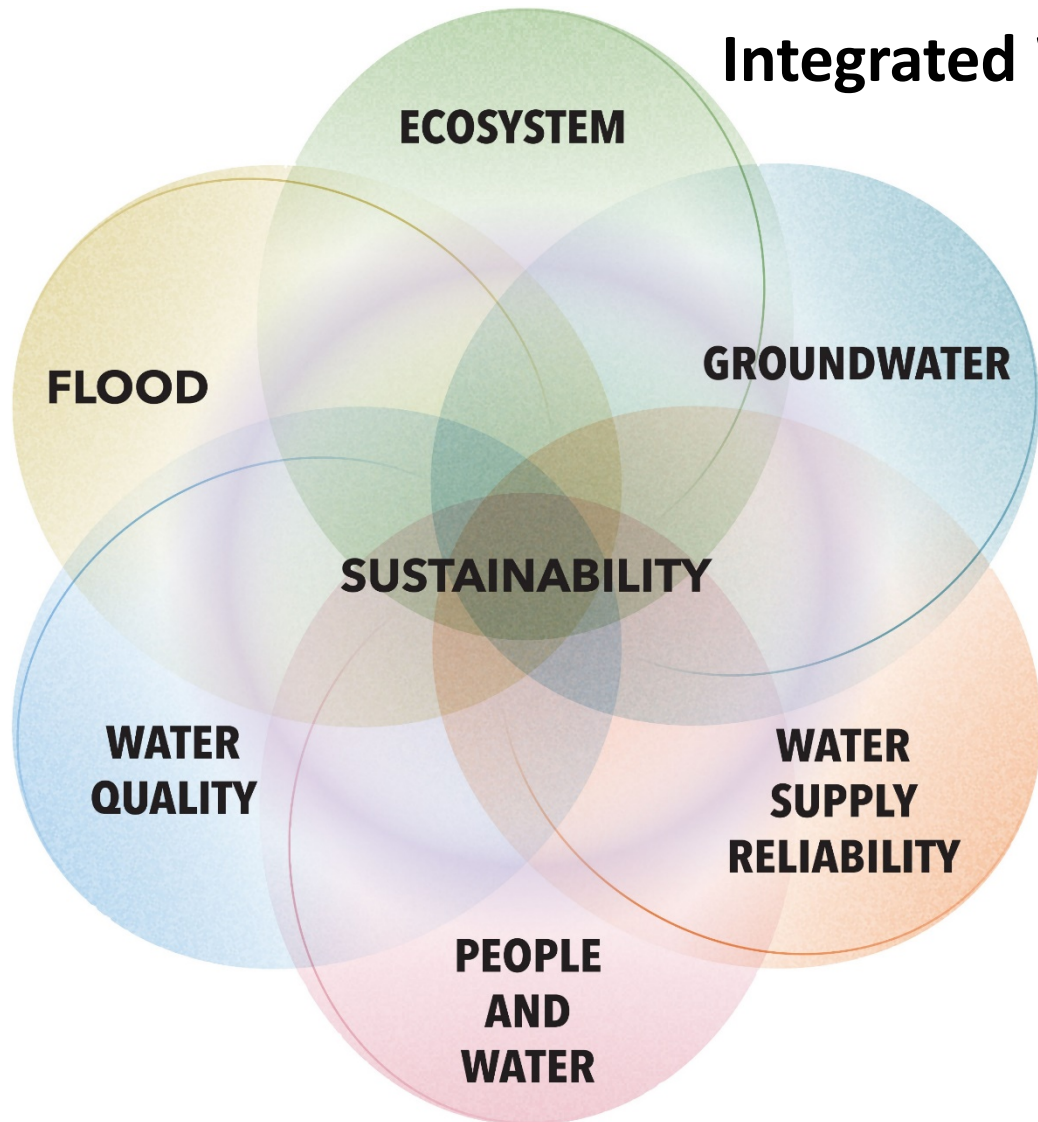
- ❖ Multi-Sector Collaboration & Multi-Benefit Projects
- ❖ Sustainability Outlook
- ❖ Regional Water Mgmt Atlas
- ❖ Investment Strategy
- ❖ Funding Scenarios



“Innovation is change that unlocks new value” - *Jamie Notter*

Update 2018 Innovations

Agency Alignment & Sector Collaboration



Integrated Watershed Management

Multi-Sector
Collaboration

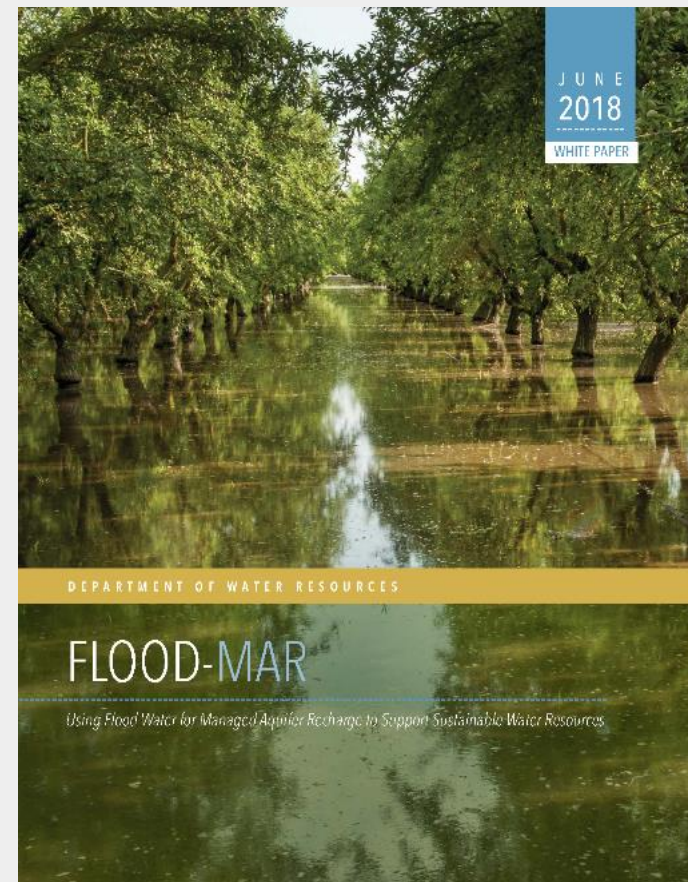
Multi-Discipline
Planning

Multi-Benefit
Projects

Multi-Fund
Investments

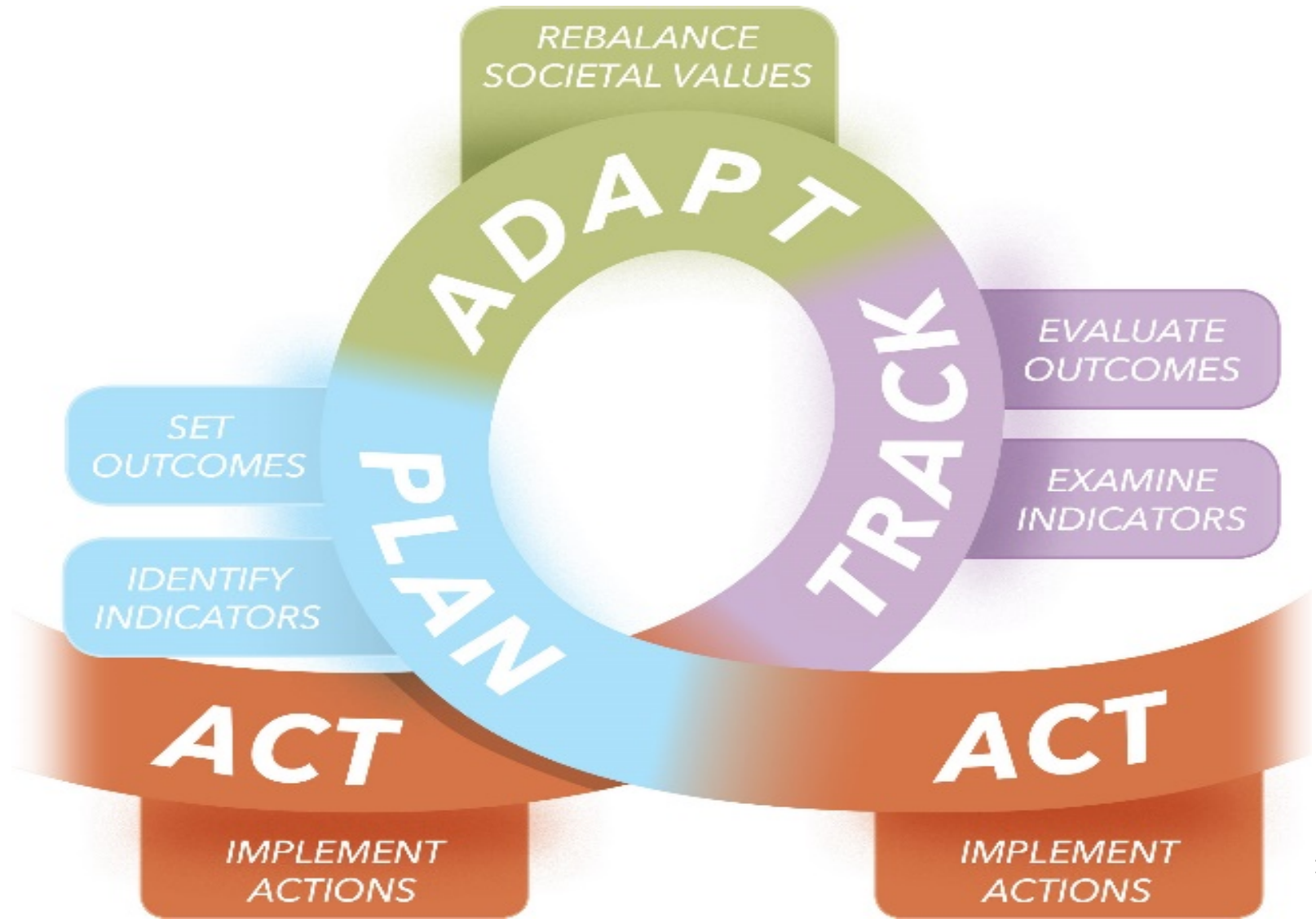
Flood-MAR

- Fact Sheet
- White Paper
- Draft Research & Data Development Framework
- Merced River Basin Conceptual Study
- Tuolumne River Climate Vulnerability Study
- Research Advisory Committee R&D Plan



CALIFORNIA DEPARTMENT OF
WATER RESOURCES

Update 2018 Innovations Tracking & Adaptive Management



Update 2018 Innovations Sustainability Outlook

Sample Value



**Public
Health &
Safety**

Sample Intended
Outcome

**An adequate water
supply for domestic
needs, sanitation, and
fire suppression**

Sample Sustainability
Indicator

**Number of public water
systems (population
served) not in compliance
with drinking water
standards**

4

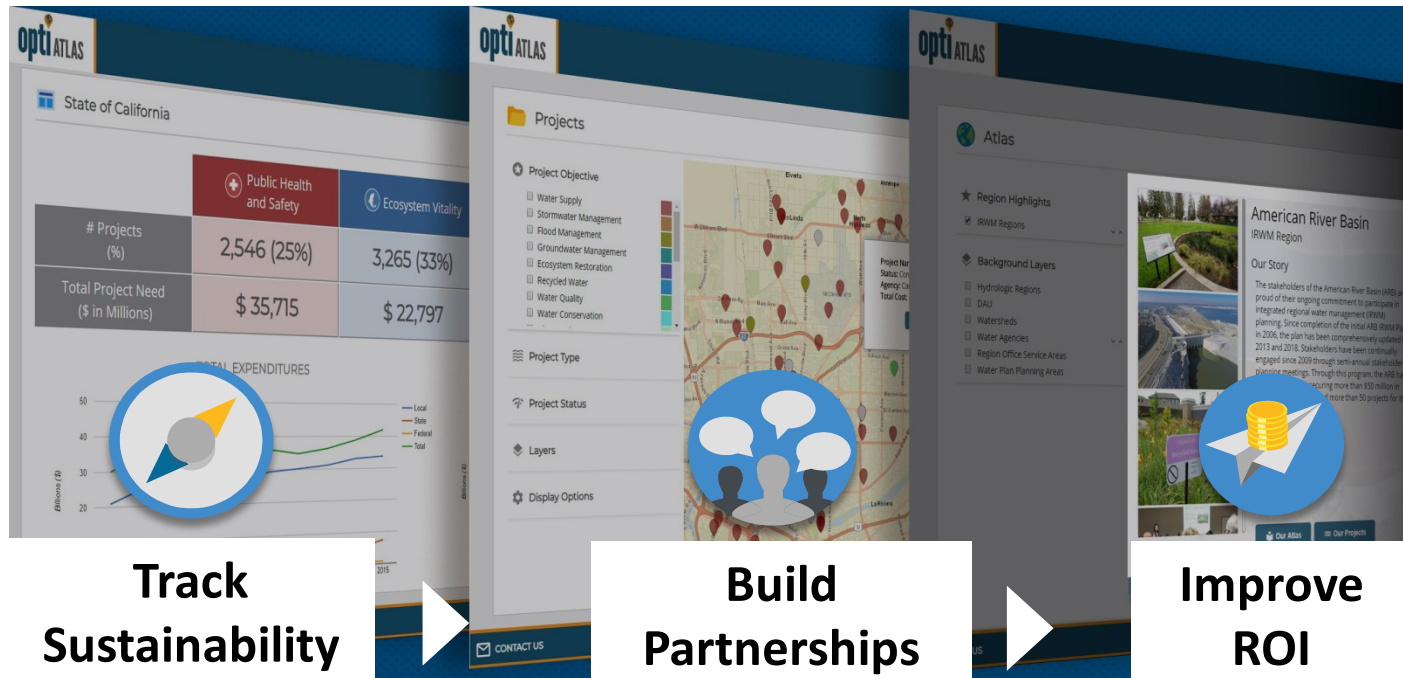
1 dozen

3 dozen

Update 2018 Innovations

Regional Water Management Atlas

- ❖ Planning & Data Synthesis Tool
- ❖ Identify Local Accomplishments and Multi-Benefit Projects
- ❖ Help Meet State Government Policies and Goals



\$90.2 Billion State Water Investment Strategy

- **\$77.8 Billion** – State Cost Share for Local/Regional Infrastructure & Ecosystem Projects (Capital/O&M)
- **\$9.7 Billion** – State Projects (Capital/O&M)
- **\$2.7 Billion** – Actions to overcome systemic & institutional challenges

- Strengthen Infrastructure (Capital/O&M)
- Restore Ecosystem Functions (Capital/O&M)
- Promote IWM Projects

The following investments are less than 3% of the investment (\$2.7 billion) needed to improve water infrastructure and restore ecosystems:

- Improve Agency Alignment, Planning & Regulatory Outcomes
- Empower Vulnerable Communities
- Informed and Adaptive Decision-Making



Sustainability Requires Consistency with Values

The combined effect of actions and projects within watersheds and groundwater basins is consistent with societal values, while fostering trust and promoting equity.



Applying Update 2018 Tools The Way Forward

- ❖ ***Sustainability Goals*** – Shared intent & outcomes to align actions
- ❖ ***Recommended Actions*** – Reflect State priorities and values
- ❖ ***Sustainability Outlook*** – Track outcomes/return on investment
- ❖ ***Investment Strategy*** – Funding to initiate actions/projects
- ❖ ***Funding Scenarios*** – Adequate & stable funding for action



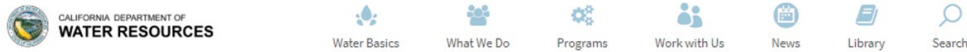
Next Steps for 2019

- 1. Stakeholder Assessment of Update 2018*
- 2. Inform Water Resilience Portfolio*
- 3. Update 2018 Implementation Plan
consistent with Water Resilience Portfolio*
- 4. Scope & Launch Update 2023*



Ways to Access Water Plan Information

❖ Visit the Water Plan Web Portal



[Home](#) | [Programs](#) | [California Water Plan](#)

California Water Plan

The California Water Plan is the State's strategic plan for sustainably managing and developing water resources for current and future generations. Required by Water Code Section 10005(a), it presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios.

The plan:

- Is updated every 5 years
- Provides a way for various groups to collaborate on findings and recommendations and make informed decisions regarding California's water future
 - Elected officials
 - Government agencies
 - Tribes
 - Water and resource managers
 - Businesses
 - Academia
 - Stakeholders
 - General public
- Can't mandate actions or authorize spending for specific actions



The Carson River, named for Kit Carson, begins in the Sierra Nevada and flows through the Carson River Basin until it ends at the Carson Sink. DWR/2011

- ▶ California Water Plan
 - ▶ Water Plan Participation
 - ▶ Water Plan Updates
 - ▶ Water Portfolios
 - ▶ Water Resource Management Strategies

Contact Us

For any questions or comments about the Water Plan, please contact us.

[Email Us](#)

Upcoming Meetings

CALIFORNIA WATER PLAN eNEWS
Special Edition July 16, 2019

This weekly electronic newsletter is designed to keep you current on California Water Plan news. We welcome comments, suggestions, and any news tips that may be of interest to water planners.

DWR Releases CA Water Plan Update 2018

DWR has released *California Water Plan Update 2018*, the latest in a series of plans for sustainably managing water resources and systems. Update 2018 provides recommended actions, funding scenarios, and an investment strategy to bolster efforts to overcome California's most pressing water resource challenges. It reaffirms State government's unique role and commitment to sustainable, equitable, long-term water resource management. It also sets the stage for preparation of the Newsom Administration's water resilience portfolio. The plan's broad and diverse portfolio of recommended actions can overcome California's critical, systemic, and institutional challenges.

Material being released in conjunction with the plan includes:

- [News release](#)
- [CNRA Secretary's Message — DWR Director's Message](#)
- [Executive Summary](#)
- [Digitally accessible version](#)

[Read the plan](#)

Supporting Documents

Update 2018 draws from, and builds on, a number of reference documents to enhance the content and produce a better plan. These supporting documents provide the methodology, assumptions, data, estimates, and other information used in the development of Update 2018. The list of more than two dozen supporting documents is available on the [Update 2018 webpage](#).

Featured Companion State Plans

The [Update 2018 webpage](#) also provides links to more than 40 companion State plans. They come from many State agencies, departments, and commissions. All the plans are related to water resources and were used to develop the policy recommendations and recommended actions that can be found in Chapter 3, "Actions for Sustainability."

Update 2018 webinar set for July 29

On Monday, July 29, [DWR will host a webinar](#) to discuss the elements of Update 2018 and its relationship to Governor Newsom's [water portfolio initiative](#). Members of the California Water Plan's executive staff will be available to answer questions during the two-hour webinar.

CALIFORNIA WATER PLAN SPLASH

In the coming weeks, the eNews will include the California Water Plan *Splash*, a segment of the newsletter featuring elements of Update 2018. The *Splash* will include links to various sections of Update 2018 and its supplemental documents.

❖ Subscribe to Water Plan eNews

Questions & Comments



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