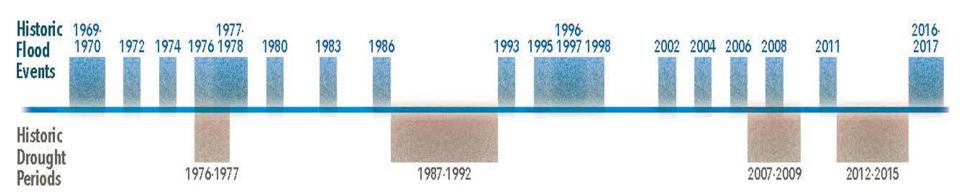




California Water Management A Tale of Extremes





Challenges to Sustainability Threaten the People & Ecosystems of CA

Greater Drought Impacts - Unreliable Water Supplies



1925

San Joaquin Valley California

BM 5661

Groundwater Depletion & Subsidence

Degraded Water Quality

Declining Environmental Conditions

Aging Infrastructure

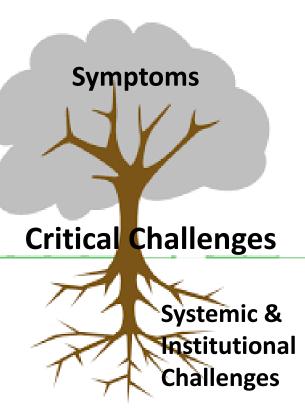
Climate Change Impacts



Low water level at Folsom Lake (Jamiary 2014)

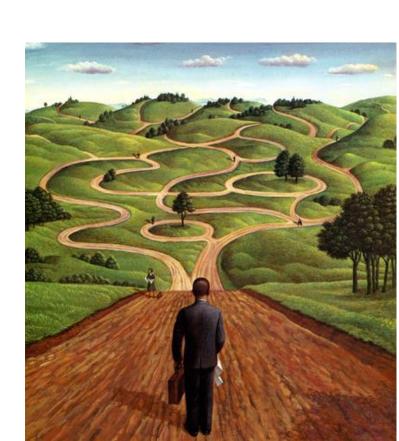
Systemic & Institutional Challenges Overcoming them Increases Return on Investment

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



Water Resources Sustainability Requires Several Ingredients

- Shared intent & outcomes
- Goals for the long view
- Alignment & integration
- Consistency with what Californians value
- Tracking & adaptive mgmt
- Time and commitment

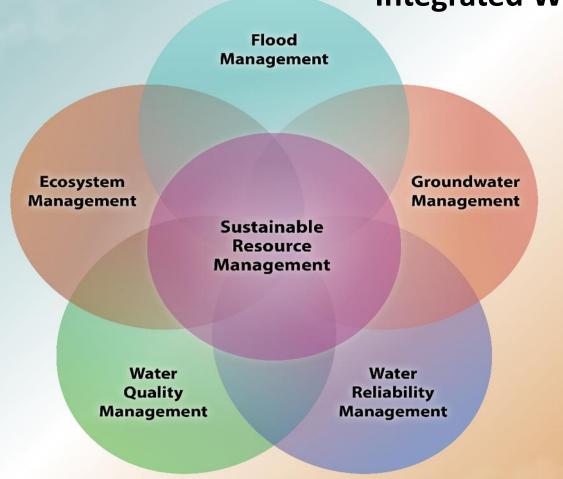


6 Sustainability Goals & 19 Rec'd Actions To Overcome Challenges

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

Sustainability Requires Alignment & Integration

Integrated Watershed Management



Multi-Sector Collaboration

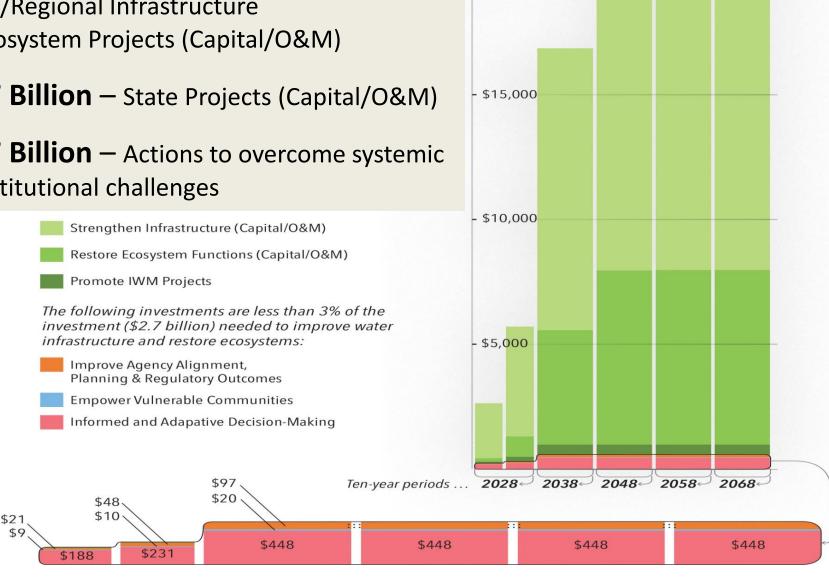
Multi-Discipline Planning

Multi-Benefit Projects

Multi-Fund Investments

\$90.2 Billion State **Water Investment Plan**

- \$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



Fifty years of investment

(in \$ millions)

\$20,000

Sustainability Requires Consistency with Values

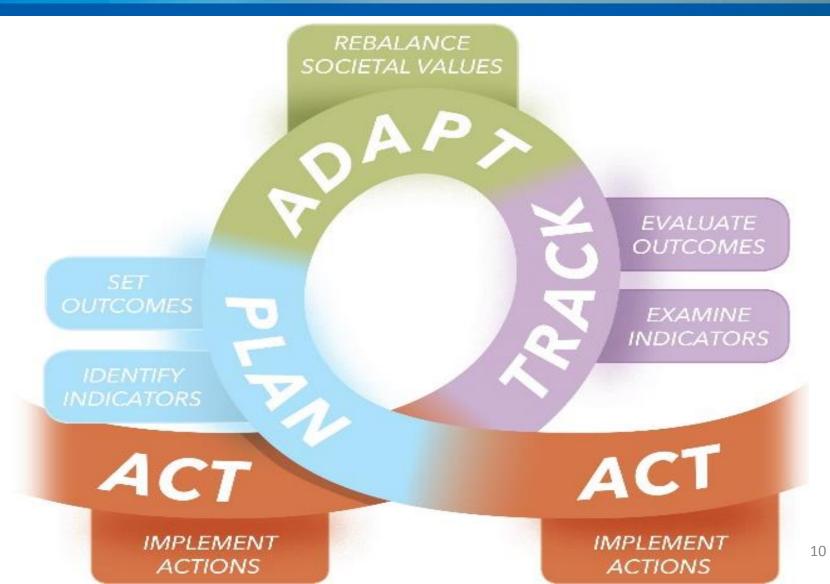


The combined effect of actions and projects within watersheds and groundwater basins is consistent with societal values,

while fostering trust and promoting equity.



Sustainability Requires Tracking & Adaptive Management



The Sustainability Outlook Demonstrate Return on Investment

Sample Value



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 Watershed-Scale Pilots Outlook is Aggregate of Regional Sustainability

Applying Sustainability Outlook locally

- Proof of concept & scalability of indicators
- Local/regional perspectives on impediments to sustainability
- Place-based solutions for governance, regulations & funding

Initiated pilot projects in partnership with:

- California Forward
- Pacific Institute
- Water Foundation
- Sonoma County Water Agency
- Santa Ana Watershed Project Authority

Update 2018 Watershed-Scale Pilots Engaging the Business Community

Pacific Institute

- Explored motivations and challenges to engage the business community on water management
- Describes how California Water Action Collaborative members identify projects to improve water security.
- Recommends best practices to engage the business community, and to strengthen & align sustainable water management actions across sectors and stakeholder groups.

Update 2018 Watershed-Scale Pilots Toward Russian River Sustainability

California Forward

- Applied the Sustainability Outlook tool at a watershed scale to evaluate how it can assist entities manage their watershed for sustainability.
- Provided a forum for stakeholders to communicate, collaborate, and chart a roadmap to align activities
- Key takeaways:
 - Vision and sustainability goals are hard to achieve without collaborative governance to coordinate entities and funding
 - Engaging all stakeholders, including Tribes, is needed to align interests and leverage resources
 - Need long-term commitment

Update 2018 Watershed-Scale Pilots Assessing Watershed-Scale Decision Making

Santa Ana Watershed Project Authority

- Evaluated application of Sustainability Outlook tool to SAWPA's One Watershed One Water (OWOW) Update 2018 assessment
- OWOW Update 2018 assessment informed selection of Sustainability Outlook's indicators and metrics
- Key takeaways:
 - State can support watershed sustainability assessments with training, funding, and data-support
 - Sustainability Outlook provides a foundation for watershed sustainability assessments
 - Ongoing regional assessments will help improve & adapt the Suitability Outlook – and visa versa



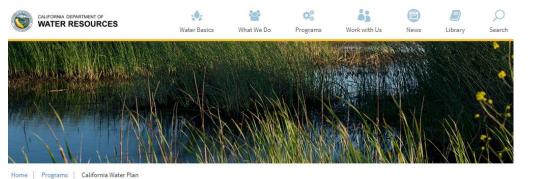
Applying Update 2018 Tools The Way Forward

- 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



Ways to Access Water Plan Information

Visit the Water Plan Web Portal



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
 - Flected officials
 - Government agencies
 - o Tribe
 - Water and resource managers
 - Businesses
 - o Academia
 - Stakeholders
 - General public
- Can't mandate actions or authorize spending for specific actions



and flows through the Carson River Basin until it ends at the Carson Sink. DWR/2011

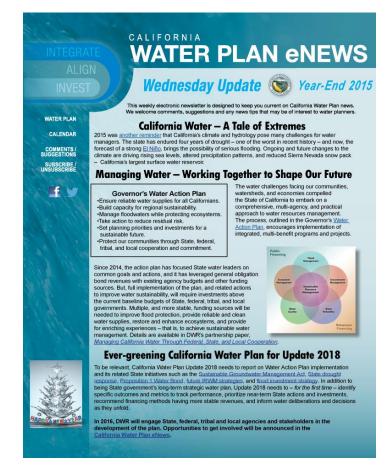
- California Water Plan
 - Water Plan Participation
 - Water Plan Updates
 - Water Portfolios
 - ▶ Water Resource Management Strategies

Contact Us

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

Email Us

Upcoming Meetings



Questions & Comments





Kamyar Guivetchi, PE kamyar.guivetchi@water.ca.gov

Statewide Integrated Water Management CA Department Water Resources