California Water 2016: What's up at the State Water Board....

Felicia Marcus Chair, State Water Resources Control Board Water Education Foundation Executive Briefing March 17, 2016

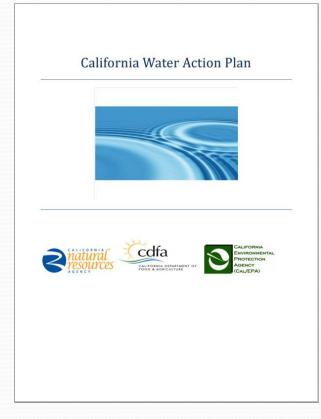
STATE W. ER RESOURCES CONTROL BOARD REGIONAL ATER QUALITY CONTROL BOARDS

Overview



- Guiding principle—prepare for future while dealing with the present
- Where we are
- Selected actions of interest
- How we need to approach

California Water Action Plan



Climate Change as Overarching Driver

- Make Conservation a California Way of Life
- Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government
- Achieve the Co-Equal Goals for the Delta
- Protect and Restore Important Ecosystems
- Manage and Prepare for Dry Periods
- Expand Water Storage Capacity and Improve Groundwater Management
- Provide Safe Water for All Communities
- Increase Flood Protection
- Increase Operational and Regulatory Efficiency
- Identify Sustainable and Integrated Financing Opportunities

Reality: Loss of snowpack

Sacramento

Valley

Jan. 18,

Sacramento Valley

Sierra Nevada - Sierra

Nevada

San Joaquin Valley

San Joaquin Valley

Jan. 18,

Statewide Drought Conditions

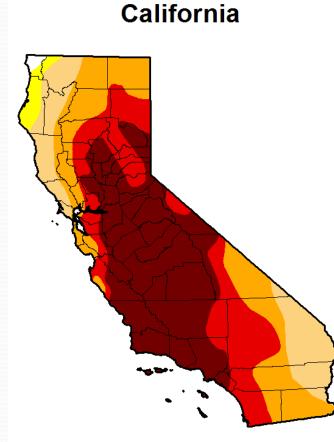
Official State of Emergency Declared on January 17, 2014

Local Emergencies Declared

- 27 Counties
- 13 Cities
- 9 Tribal Reservations
- 12 Special Districts

County & Tribal Drought Task Force

- 30 Counties
- 2 Tribes



U.S. Drought Monitor

March 8, 2016 (Released Thursday, Mar. 10, 2016) Valid 7 a.m. EST

Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.43	99.57	97.49	83.16	60.86	38.48
Last Week 3/1/2016	0.43	99.57	95.13	82.66	60.86	38.48
3 Month s Ago 12/8/2015	0. 14	99.86	97.33	92.26	69.09	44.84
Start of Calendar Year 12/29/2015	0.00	100.00	<mark>97.3</mark> 3	87.55	69.07	44.84
Start of Water Year 9/29/2015	0. 14	99.86	<mark>97.3</mark> 3	92.36	71.08	46.00
One Year Ago 3/10/2015	0. 16	99.84	98.11	93.44	67.46	39.92

Intensity:



D2 Severe Drought

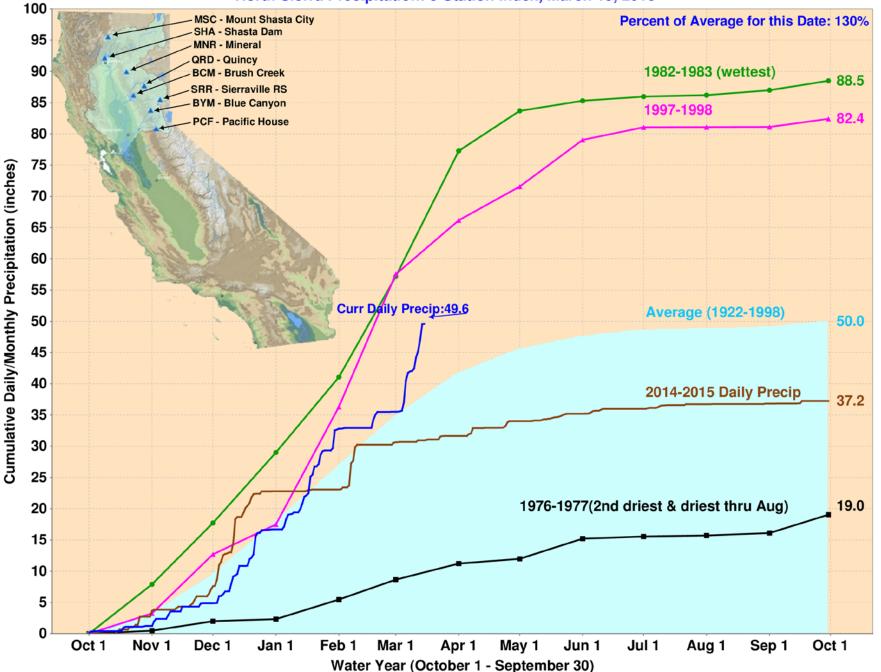
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author: David Miskus NOAA/NWS/NCEP/CPC



http://droughtmonitor.unl.edu/

North Sierra Precipitation: 8-Station Index, March 15, 2016



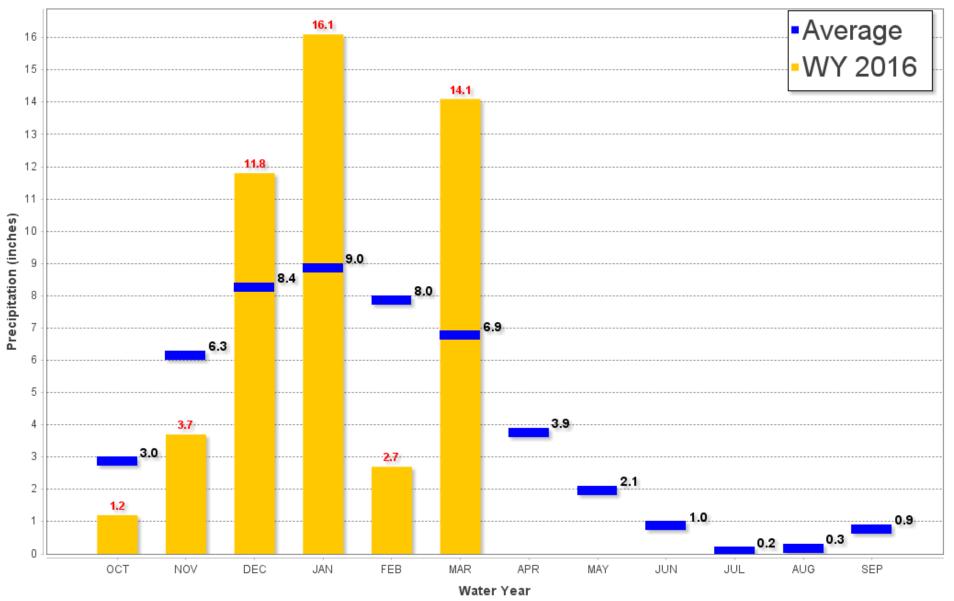
Total Water Year Precipitation



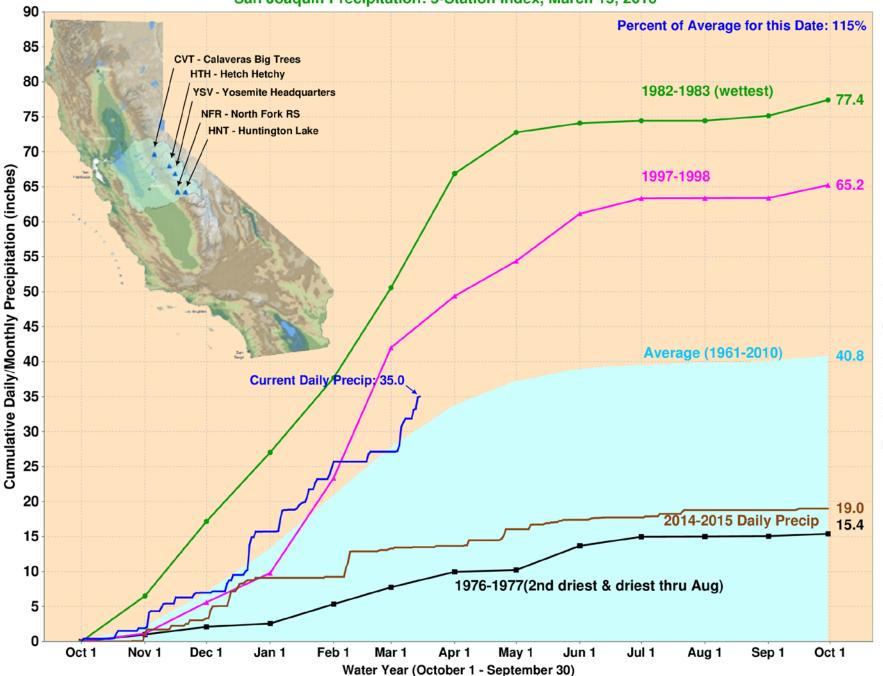
Northern Sierra 8-Station

Precipitation Index for Water Year 2016 - Updated on March 15, 2016 08:45 AM

Note: Monthly totals may not add up to seasonal total because of rounding Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST







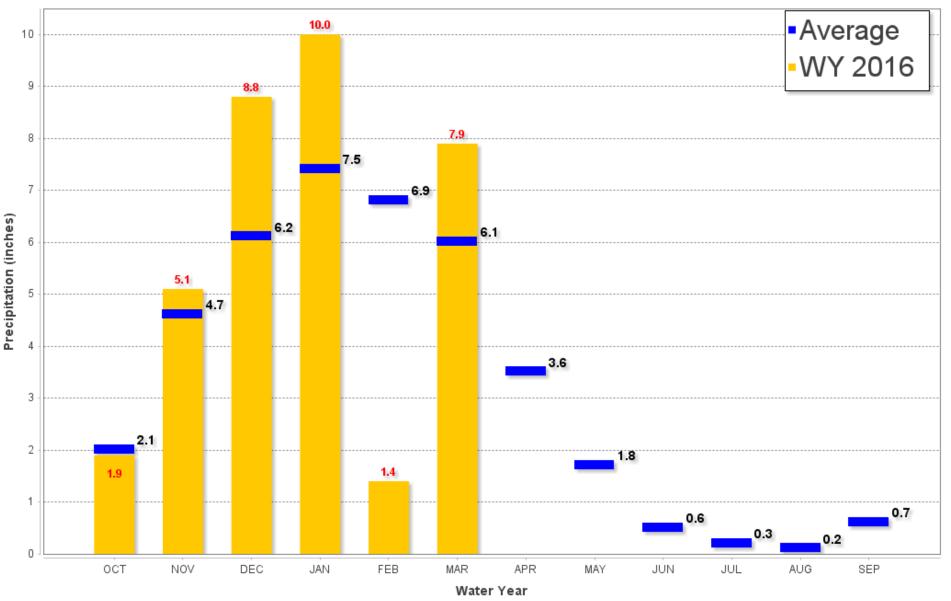
Total Water Year Precipitation

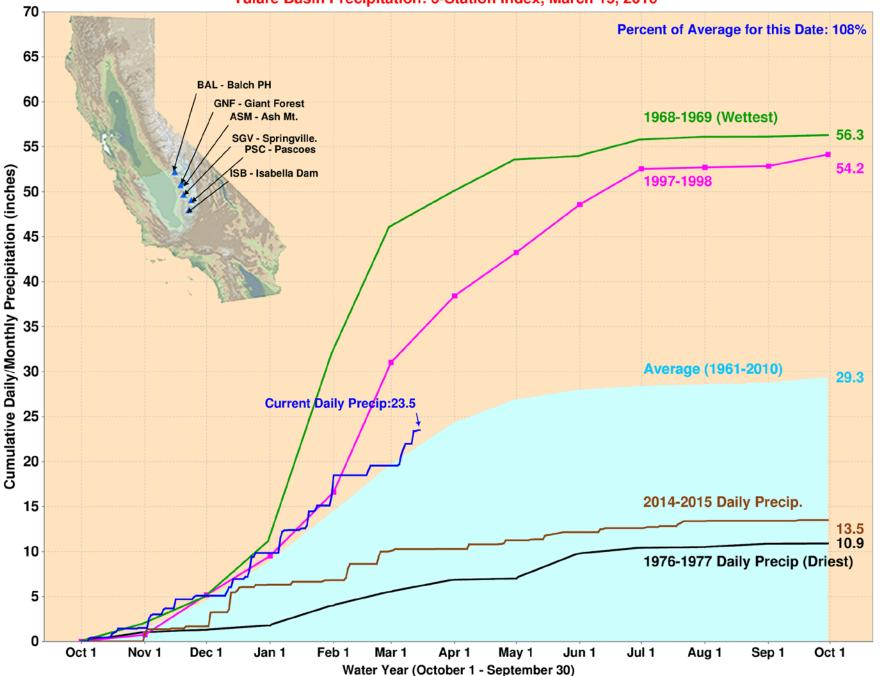


San Joaquin 5-Station

Precipitation Index for Water Year 2016 - Updated on March 15, 2016 08:45 AM

Note: Monthly totals may not add up to seasonal total because of rounding Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST





Tulare Basin Precipitation: 6-Station Index, March 15, 2016

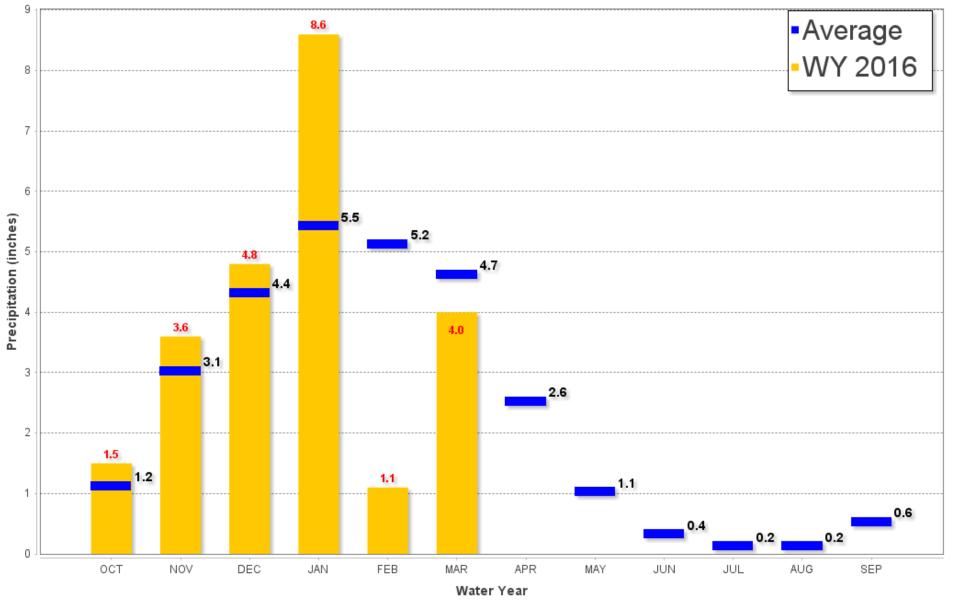
Total Water Year Precipitation



Tulare Basin 6-Station

Precipitation Index for Water Year 2016 - Updated on March 15, 2016 08:45 AM

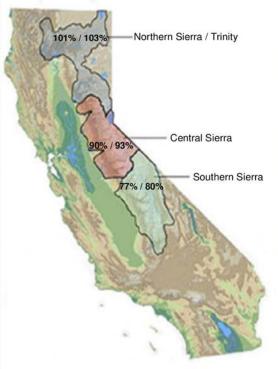
Note: Monthly totals may not add up to seasonal total because of rounding Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST





Current Regional Snowpack from Automated Snow Sensors

% of April 1 Average / % of Normal for This Date



NORTH Data as of March 15, 2016		
Average snow water equivalent (Inches)	28.5	
Percent of April 1 Average (%)	101	
Percent of normal for this date (%)	103	

CENTRAL Data as of March 15, 2016		
Average snow water equivalent (Inches)	26.6	
Percent of April 1 Average (%)	90	
Percent of normal for this date (%)	93	

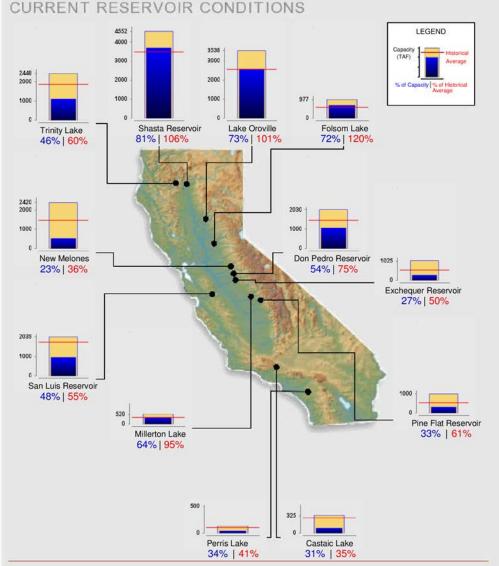
SOUTH Data as of March 15, 2016		
Average snow water equivalent (Inches)	20.9	
Percent of April 1 Average (%)	77	
Percent of normal for this date (%)	80	

STATE		
Data as of March 15, 2016		
Number of Stations Reporting	92	
Average snow water equivalent (Inches)	25.4	
Percent of April 1 Average (%)	89	
Percent of normal for this date (%)	92	

Statewide Average: 89% / 92%

Reservoir Conditions

Ending At Midnight - March 14, 2016



	% Cap	% Avg
Trinity	46	60
Shasta	81	106
Oroville	73	101
Folsom	72	120
New Melones	23	36
San Luis	48	55

Graph Updated 03/15/2016 08:45 AM

Selected state actions

- Water Rights actions
- Emergency food and water deliveries
- Conserving and augmenting supply*
 - Recycled Water \$\$ and streamlining
 - Emergency Conservation Regulations
 - Model Landscape Rules
- California Water Action Plan acceleration
- Proposition 1 \$7.57 billion bond
- Legislation/budget augmentation/acceleration

^{*}other actions on stormwater capture, desalination rules, agricultural water management plans, groundwater management

Water Board Priorities

Overall: Implement Water Action Plan and Steward Bond Monies Effectively

Water Supply

- Dealing with drought and...
- Bay-Delta Water Quality Plans
- Delta Water Fix: Water Rights Permit change
- Resolving decadal conflicts between water users
- Taking Public Trust and Waste and Unreasonable Use responsibilities seriously
- Groundwater management: lend support/observe
- Mandatory Urban Conservation Regs: tune-up at right time
- Action over stasis

Water Quality

- Big point source to diffuse externality of socially productive exercise
- Safe Drinking Water: top of charts
- Stormwater Strategic Plan
- Recycled water advancement
- Desal policy: implement
- Contaminated GW basins: accelerate cleanup/functional use
- Irrigated lands appeals and implementation
- Fracking/O&G: implement SB4+
- Nutrients/Harmful Algae blooms
- ...Toxicity/Wetlands/etc...
- Did I say action over stasis?

Dealing with reality

"I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts, and beer."



Reality: Loss of snowpack

Sacramento

Valley

Jan. 18,

Sacramento Valley

Sierra Nevada - Sierra

Nevada

San Joaquin Valley

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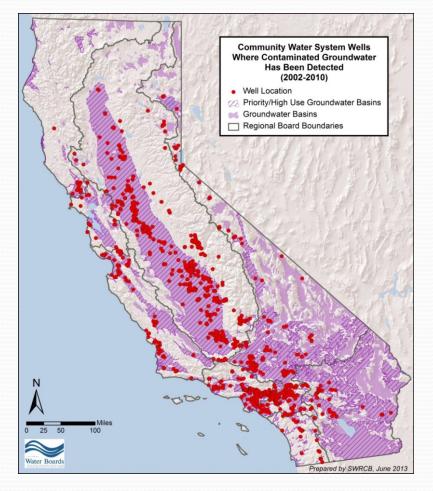
Jan. 18,

Reality: The Delta needs our help

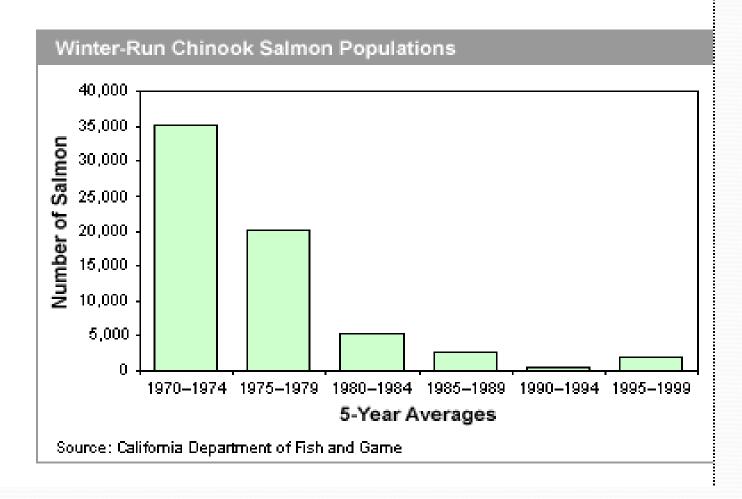
Sacramento-San Joaquin Delta



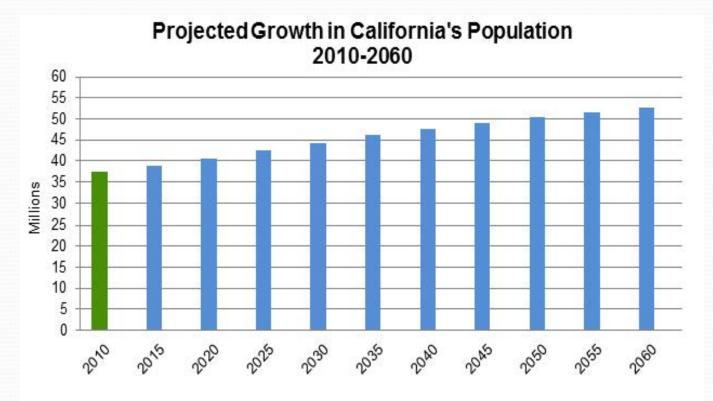
Reality: Community Well Systems Where Contamination has been Detected



Reality: Fish and wildlife are imperiled



Reality: Population will rise



• Source: Department of Finance; Controller Betty Yee website

Reality: California agriculture is precious resource for all of us



Reality: We can do something about it

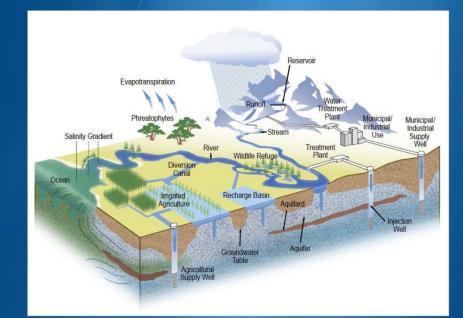


Water 4.0

The Past, Present, and Future of the World's Most Vital Resource

Daniel Cardlade

A Call to Integrate Interconnected Systems Require Integrated Solutions



Reality: We are doing something about it

- Myriad Individual acts of transcending traditional silos
 - Integrated Regional Water Management
 - Drought "angels"
 - Fish/farmer win/wins
- Legislative agreements, e.g.,
 - "Human right to water"
 - 2009 legislation/"coalition of the willing"
 - Groundwater legislation
 - Water Bond
 - Move of drinking water program and creation of Office of Sustainable Solutions
- Local leadership
 - Conservation heroes
 - Stormwater capture/Recycled water/Contaminated basins—and other integrated solutions

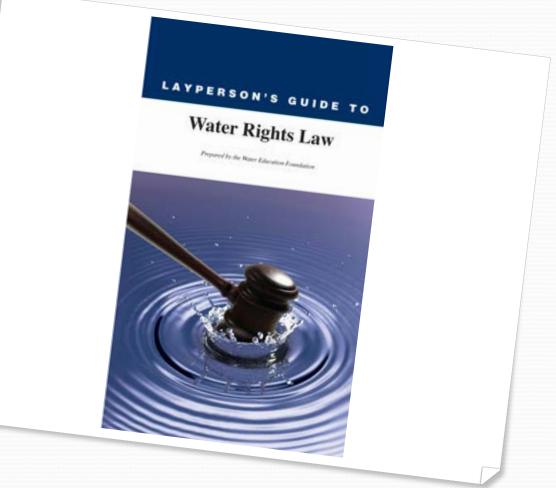
Bay-Delta Actions 2016+

- Water
 Quality
 Control Plan
 Update
- Water Fix Water Rights Petition Hearings



Water Rights

- Drought actions and follow through
- Information
 management
- Dispute resolution



Urban Resilience

- Conservation/Eff iciency
- Water Recycling Acceleration
- Stormwater Strategy/Multipl e Benefit Incentives

Water 4.0

The Past, Present, and Future of the World's Most Vital Resource

David Sedlak

Groundwater management

SGMA role:

- Assist locals
- Assist DWR
- Due Diligence in anticipation of Backstop role



Safe Drinking Water

- Standard setting e.g., 123tcp
- Continuation of drought response with DWR/OES
- Consolidation work
- Prop 1 grants; SRF loans
- Irrigated Lands Regulatory Program
- Teeing up proposals to help DACs obtain capacity to provide and treat clean, safe, and affordable drinking water



Proposition 1

- Water Recycling
- Drinking water and Wastewater for DACs
- Contaminated Groundwater
- Stormwater



How do we get there?

- Clear-eyed focus on the decades ahead vs. the decades behind us
- Focus on Reality vs. Rhetoric; Practical vs. Theoretical
- Embrace complexity
- Action over Stasis
- Convergence over Conflict
- "All of the Above" vs. "Either/Or"
- Ag <u>and</u> Urban, Ag <u>and</u> Ecosystem, North <u>and</u> South, the Delta <u>and</u> the Projects, Agriculture <u>and</u> Safe Drinking Water

Thank you!!!

