



California Water System

Current Issues

February 4, 2016

Agenda Topics

- The Delta
- Groundwater Issues
- IRWM
- Drought/El Nino (Climate Change)
- Major Water Supply Reliability Obstacles



California Water Systems



- Fueled California economy
- All had unintended consequences
- All are less reliable today

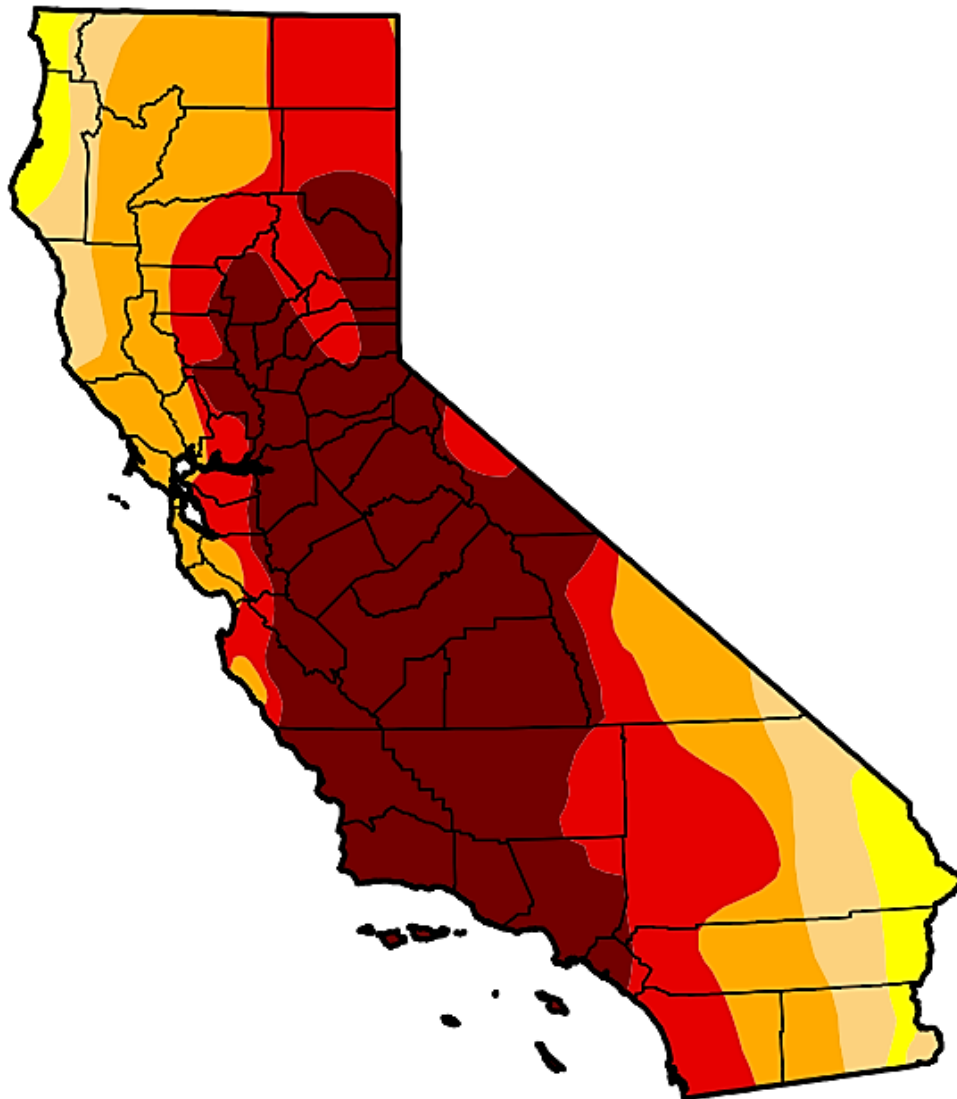
Water Management Challenges

- Aging Infrastructure
- Increasing Population
- Degraded Ecosystems
- Groundwater Overdraft
- Management Fragmentation
- Climate Change (increase in extremes)



U.S. Drought Monitor California

January 26, 2016
(Released Thursday, Jan. 28, 2016)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	95.35	86.13	63.96	40.21
Last Week <i>1/19/2016</i>	0.00	100.00	97.17	86.13	68.15	42.66
3 Months Ago <i>10/27/2015</i>	0.14	99.86	97.33	92.27	71.08	46.00
Start of Calendar Year <i>12/29/2015</i>	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year <i>9/29/2015</i>	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago <i>1/27/2015</i>	0.00	100.00	98.13	94.34	77.52	39.99

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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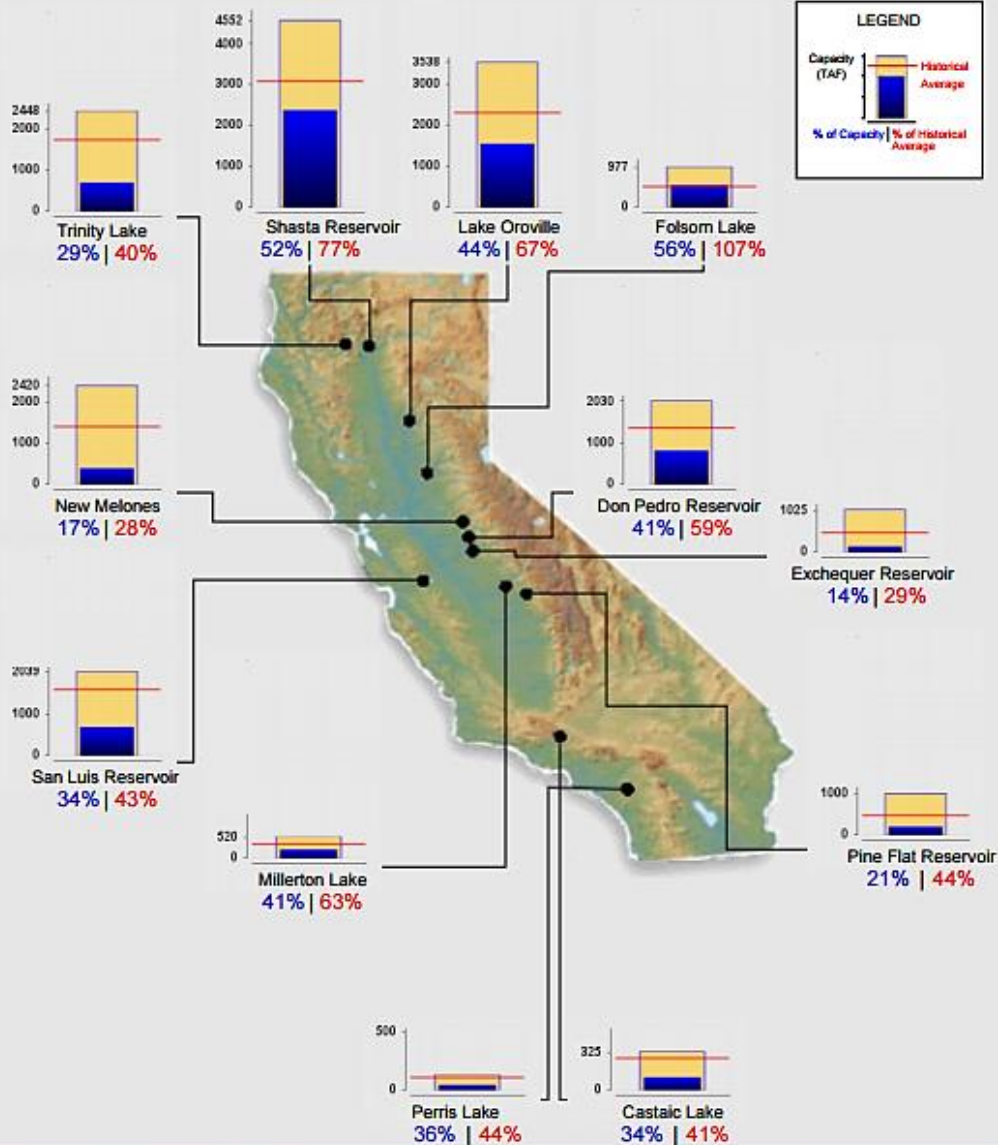




Reservoir Conditions

Ending At Midnight - February 1, 2016

CURRENT RESERVOIR CONDITIONS

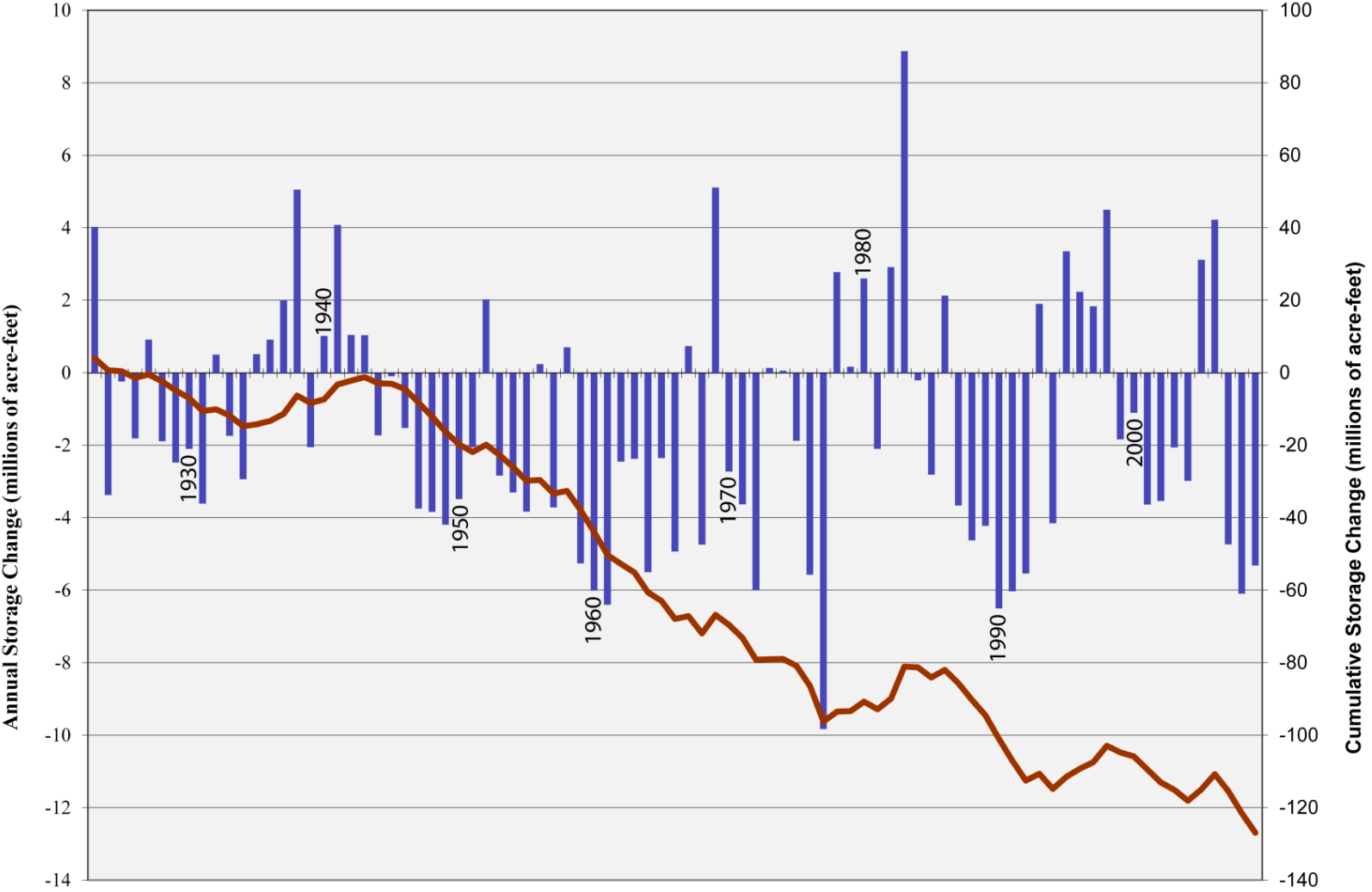








Change in Groundwater Storage for the Central Valley

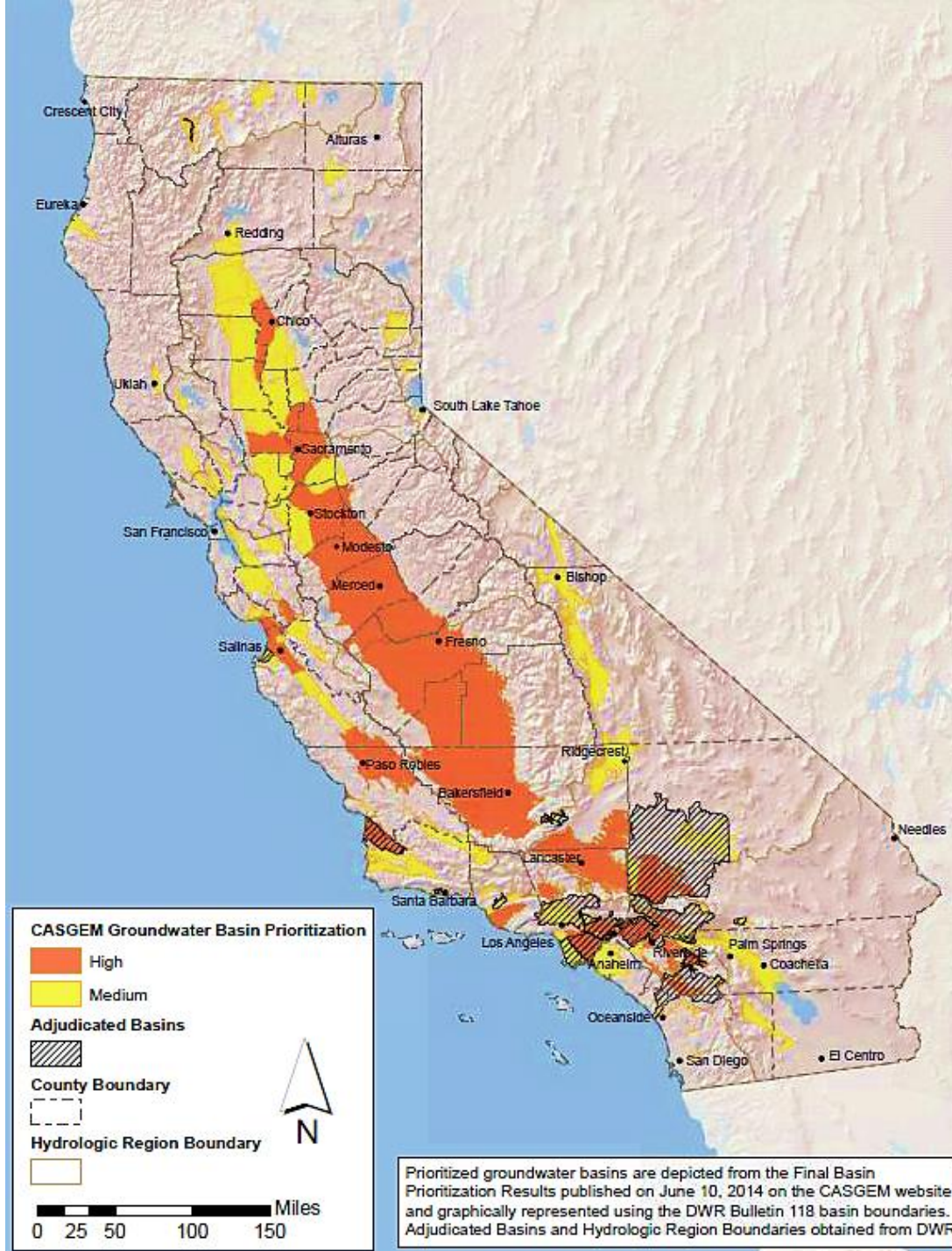


Source: RMC analysis of C2VSIM historical simulation results, 2012.

■ Annual Storage Change — Cumulative Storage Change

Sustainable Groundwater Management Act (SGMA)

- Fundamental change in groundwater management
- Sustainability Goal (20 years with 5-year milestones)
- Local Empowerment
 - Local authorities to manage groundwater
 - Local agency formation (GSAs)
 - Local plans (GSPs)
 - “Exempts” adjudicated basins
- State Role
 - Assistance (financial and technical)
 - Plan Review
 - Back-Stop



Sustainable Groundwater Management Act (**SGMA**)

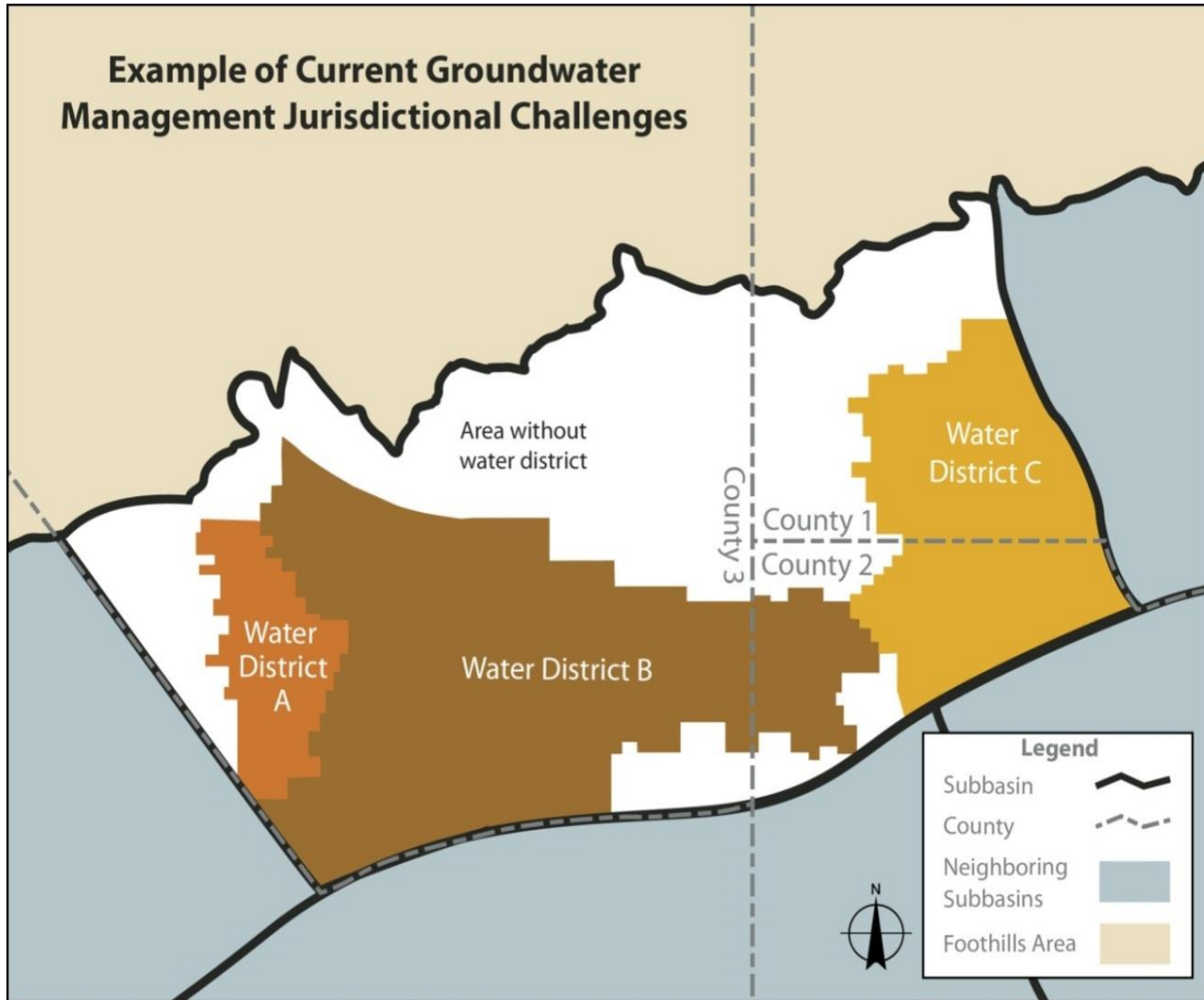
Sustainability: Manage groundwater to prevent undesirable results (significant & unreasonable):

- Chronic lowering of groundwater levels
- Reduction of groundwater storage
- Seawater intrusion
- Degraded water quality
- Land subsidence
- Depletions of interconnected surface water

Sustainable Groundwater Management Act (SGMA)

Deadline	Action	Who
January 2016	Basin Boundary regulations (completed)	DWR
June 2016	Groundwater Sustainability Plan (GSP) regulations	DWR
June 2017	Groundwater Sustainability Agency (GSA) Formation	Local agencies
January 2020/2022	GSPs submitted to DWR –provides the roadmap to sustainability	Local GSAs
Annually	Annual reporting to DWR on total water use, groundwater extractions, change in groundwater elevation and storage	Local GSAs
Every 5 years	Achieve interim milestones toward sustainability goal	Local GSAs
20-year implementation	GSP implementation and achievement of sustainability goal	Local GSAs

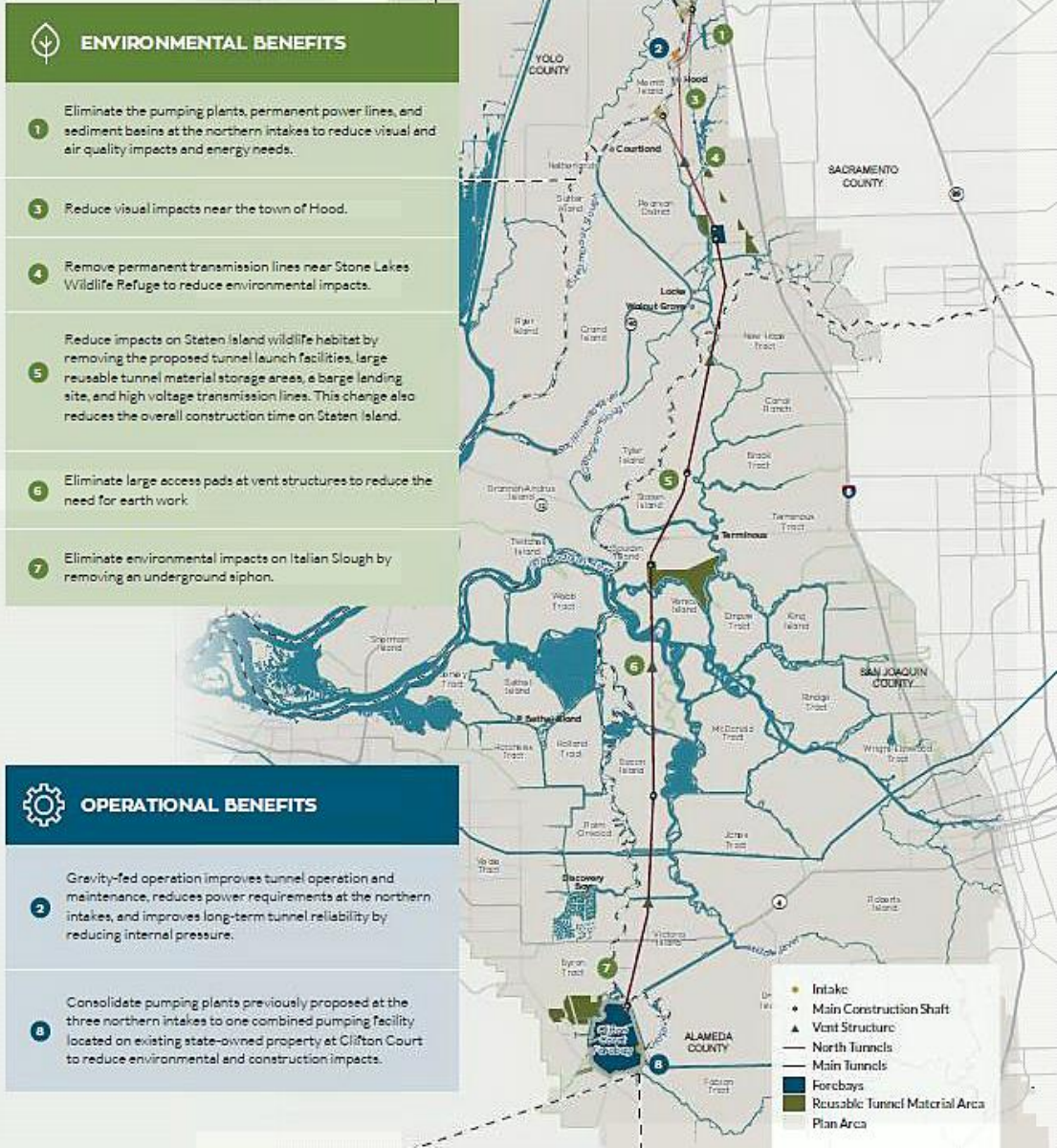
Jurisdiction Formation

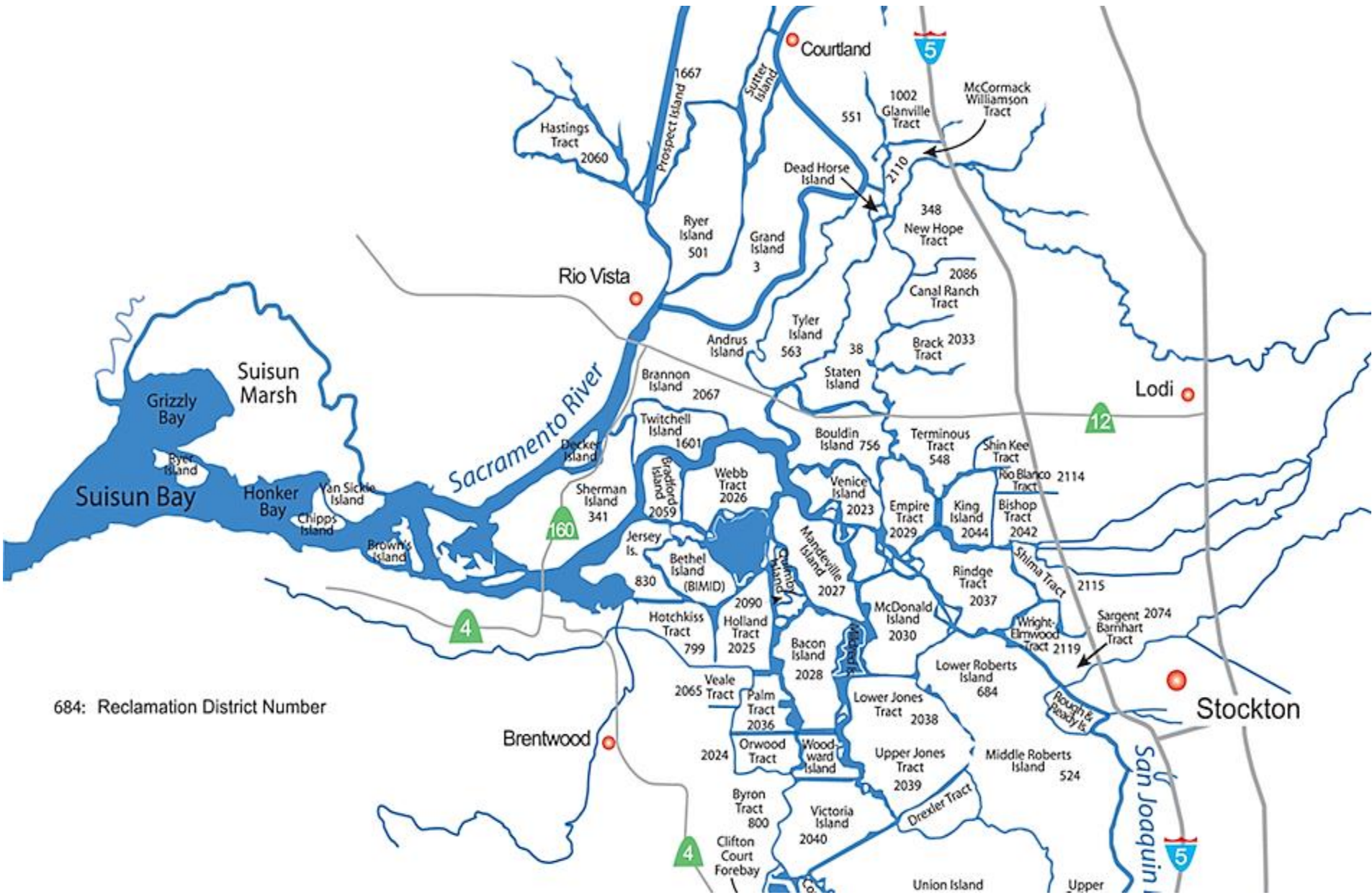


Delta Tunnels

PROPOSED PROJECT CHANGES

Reducing environmental impacts and improving operations

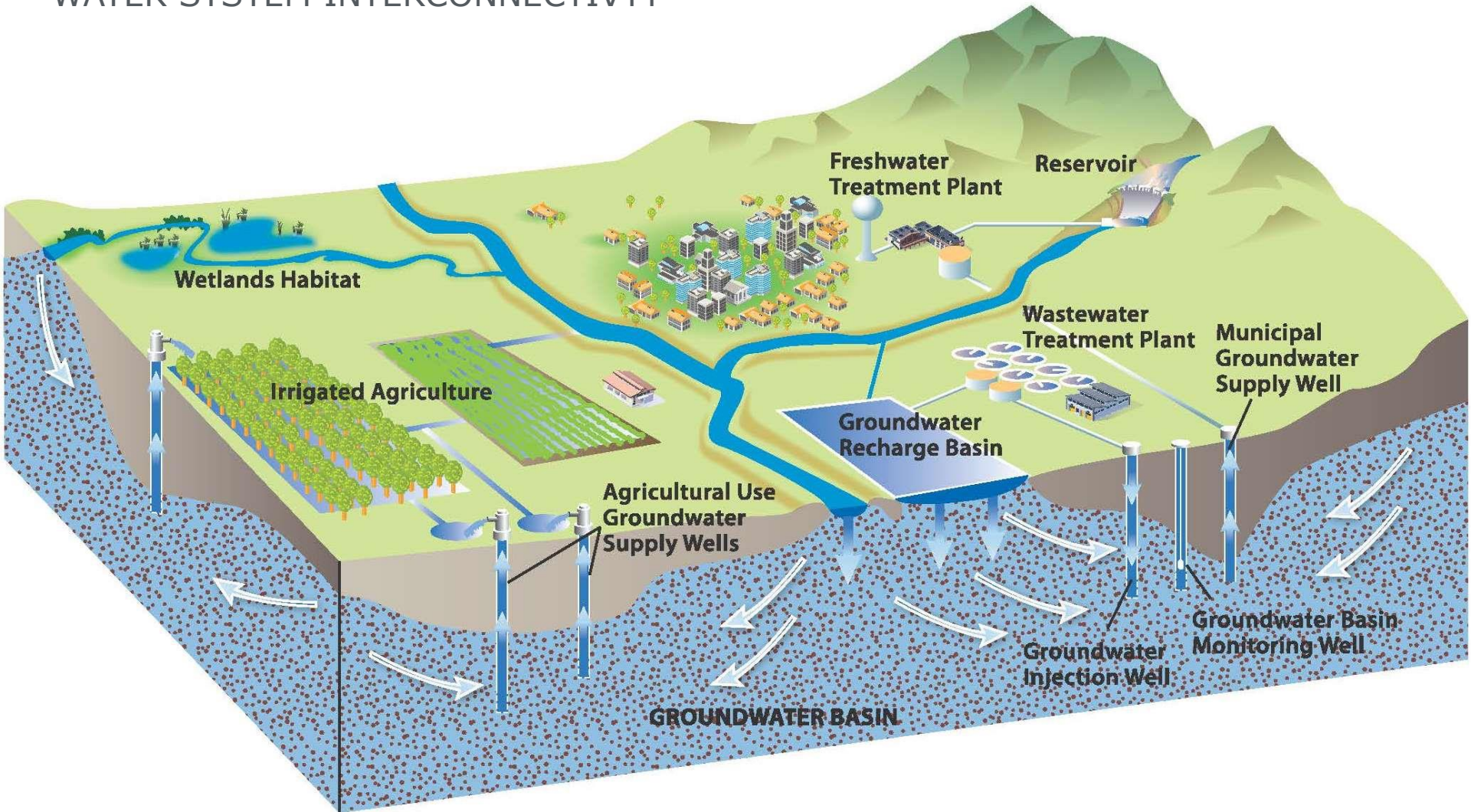






Integrated Water Management

WATER SYSTEM INTERCONNECTIVITY





1DS7475

CRYSTAL GEYSER
Alpine Drinking Water
Purified Water



Do not use this water for drinking.
No utilice esta agua para beber.

POR FAVOR LLEVE
UN PANELETO Y
PESADINA



Transformative Moment in California Water

- Invest in Management Diversification
- Create Markets to Move Water
- Drive Conservation
- Build Ecosystem Resilience
- Safe Drinking Water for All



SWM Profile Framework

Themes	Stressors	Stress Level	Management Response			
		High/Moderate/Low	Initial Steps	Moderate Progress	Advanced Progress	Leading Practice
SUPPLY						
	1. Supply Reliability					
	2. Groundwater Supply					
	3. Source Water Quality					
	4. Natural Hazards					
	5. Climate Change					
DEMAND						
	6. Urban Demand					
	7. Agricultural Demand					
ENVIRONMENT						
	8. Sensitive Species					
	9. Watershed Health					
FINANCE						
	10. Finance and Investment					

Integrated Water Management

WATER SYSTEM INTERCONNECTIVITY

