California Water Plan Update 2013 Topic-Based Caucuses

Presentation for Regional Forums

Update 2013 Outreach Venues

- State Agency Steering Committee *(30 State Agencies)*
- Federal Agency Network
- Tribal Advisory Committee
- Public Advisory Committee
- Regional Forums

- **Topic-based Caucuses**
- SWAN - Statewide Water Analysis Network
- Annual Plenary Meetings

Content Enhancements

- **Integrated Water Management**
  - Expand on water quality
  - Continue integrated flood mgmt
  - Expand on groundwater
  - Add near coastal resources
- **Regional Planning**
  - Expand on land use & water mgmt nexus
  - Incorporate UWMP content
  - Expand economic & financial planning
- **Data, Metrics & Analysis**
  - Improve data mgmt & sharing
  - Enhance inter-disciplinary technical analyses
  - Develop metrics & sustainability indicators
  - Develop CA Water Mgmt Progress Report
- **Adaptive Management**
  - Revisit environmental water concept
  - Use Living Document approach
  - Use multiple & shorter planning horizons
  - Identify outdated water codes & laws

California Water Plan Update 2013

Early Focus Topics / Caucuses

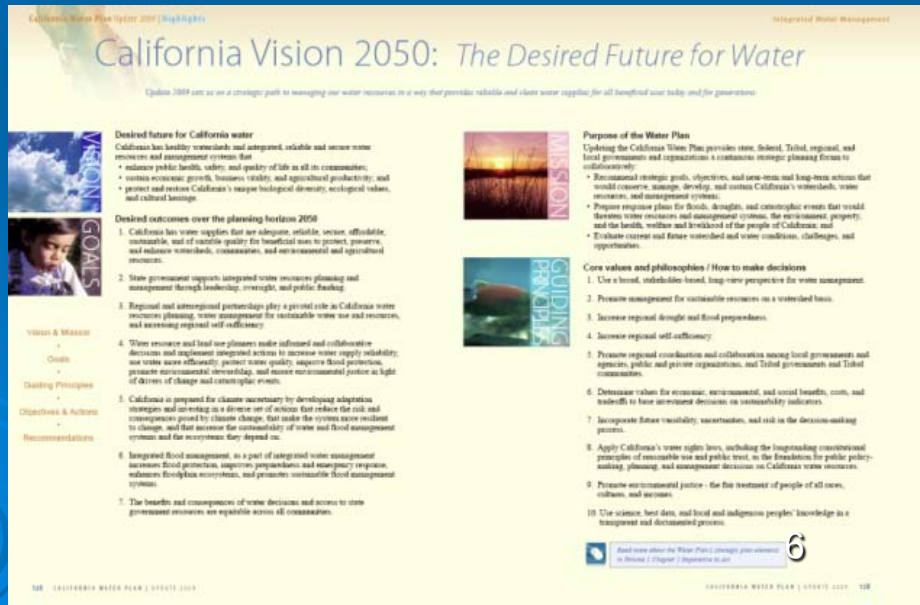
- Update 2013 Finance Planning
- Reinventing Regional Reports
- Groundwater
- Statewide Integrated Flood Planning
- New Water Technology / R&D

Water Plan Update 2013

Integration of
Update 2013 Groundwater Content
Enhancements

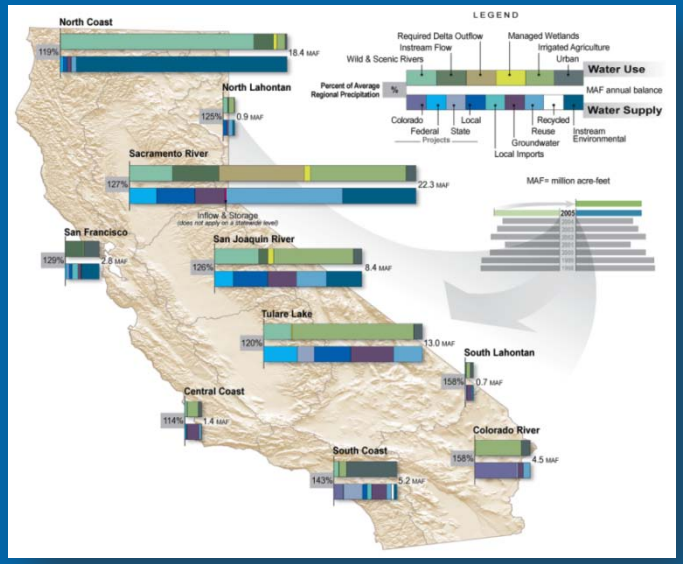
Strategic Plan
Relevance to Groundwater Content Enhancements

- Update 2005 Strategic Plan informed Proposition 84 language
- Update 2009 Strategic Plan informed Update 2013 groundwater content enhancement work plan and priorities
- Both will evolve into the basis for Update 2013 Groundwater work plan, analysis and recommendations
- High-level groundwater policy recommendations will be published in Update 2013 Strategic Plan



Water Portfolios
Relevance to Groundwater Content Enhancements

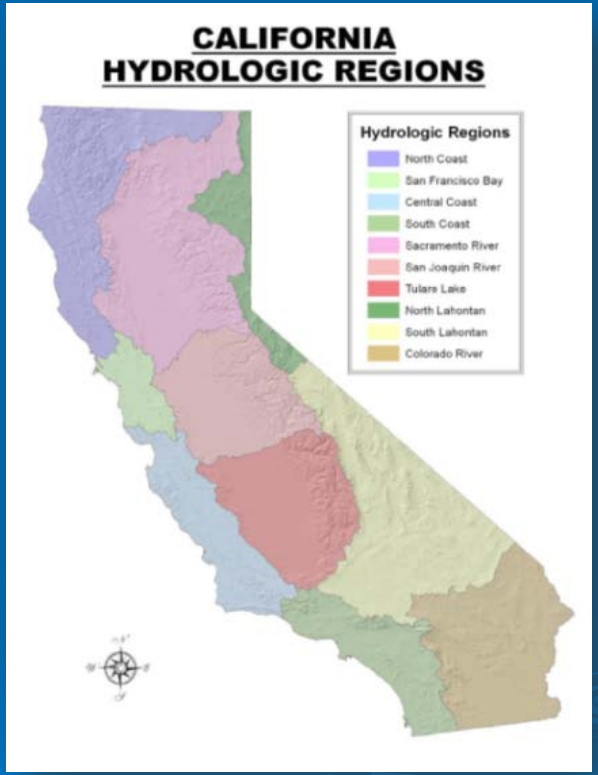
- Context for historical water use and corresponding supply sources *(Groundwater is largely a balancing term due to lack of data)*
- Articulates statewide *and* regional water use and supply sources



- Used to identify trends, challenges and opportunities at the statewide and regional scales
- Update 2013 water portfolios will include groundwater data and computation enhancements; including change in storage

Regional Reports
Relevance to Groundwater Content Enhancements

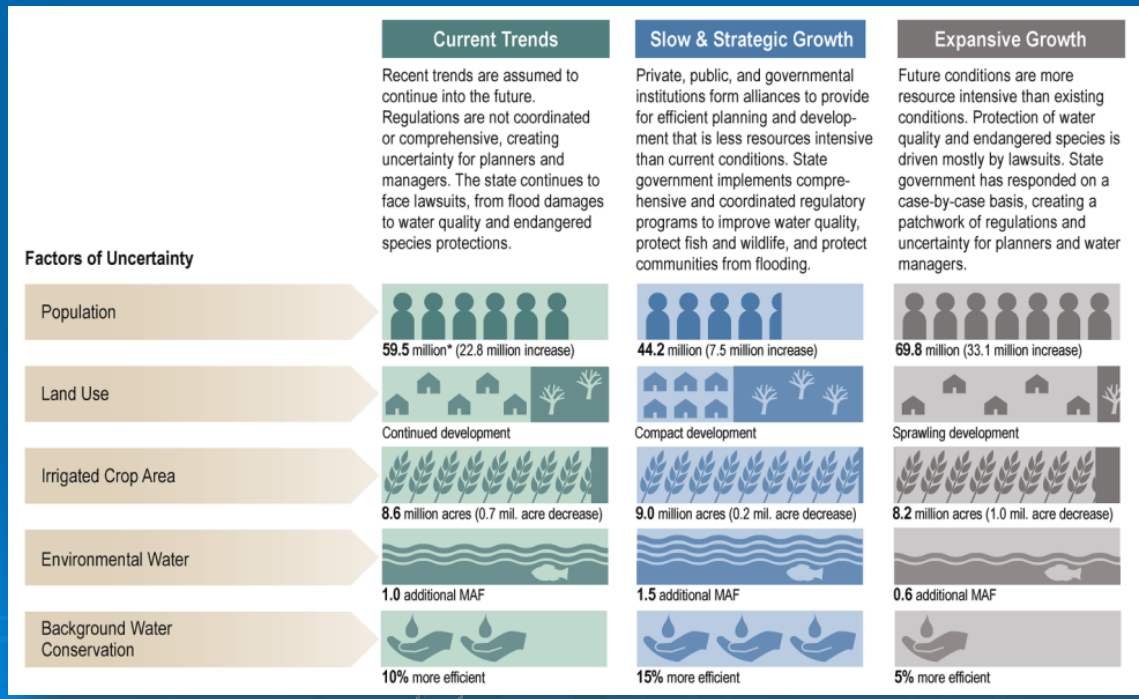
- Articulation of information, data, challenges, opportunities and regional resource management objectives
- Groundwater conditions, challenges, proposals and priorities will be described in regional reports
- Ensure regionally relevant solutions
- Case study will be published in corresponding Regional Report



Water Plan Update *Future Scenarios*
Relevance to Groundwater Content Enhancements

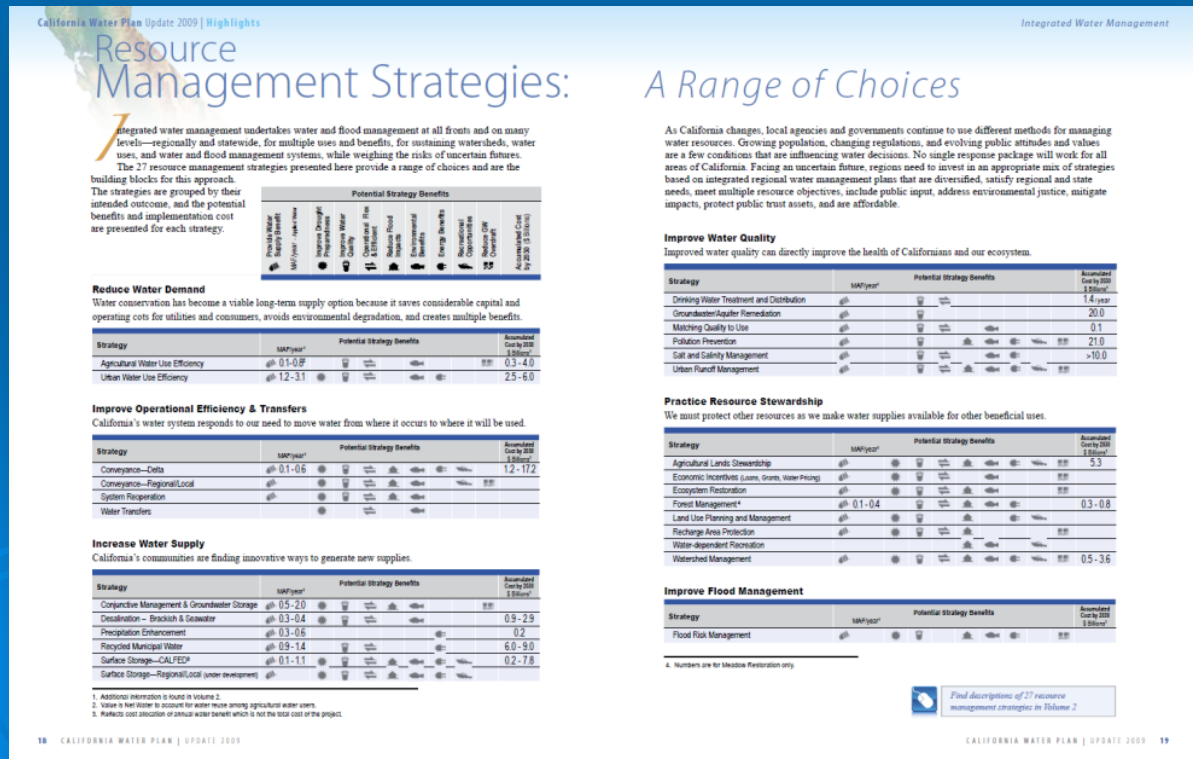
- Three plausible sets of future conditions that can affect the necessity for (and performance of) management strategies

- Used to assess trade-offs and resiliency of resource management strategy packages to guide groundwater action and policy recommendations



Water Plan Update *Resource Management Strategies* Relevance to Groundwater Content Enhancements

- Many groundwater policy and action recommendations will be drawn from menu of Resource Management Strategies
  - Update 2009 strategies included conjunctive use, groundwater storage, recharge area protection, aquifer remediation, etc
- One source of information for estimating groundwater management strategy costs



California Water Plan Update 2009 | Highlights

Integrated Water Management

Resource Management Strategies: *A Range of Choices*

Integrated water management undertakes water and flood management at all fronts and on many levels—regionally and statewide, for multiple uses and benefits, for sustaining watersheds, water uses, and water and flood management systems, while weighing the risks of uncertain futures. The 27 resource management strategies presented here provide a range of choices and are the building blocks for this approach. The strategies are grouped by their intended outcome, and the potential benefits and implementation cost are presented for each strategy.

As California changes, local agencies and governments continue to use different methods for managing water resources. Growing population, changing regulations, and evolving public attitudes and values are a few conditions that are influencing water decisions. No single response package will work for all areas of California. Facing an uncertain future, regions need to invest in an appropriate mix of strategies based on integrated regional water management plans that are diversified, satisfy regional and state needs, meet multiple resource objectives, include public input, address environmental justice, mitigate impacts, protect public trust assets, and are affordable.

Reduce Water Demand

Water conservation has become a viable long-term supply option because it saves considerable capital and operating costs for utilities and consumers, avoids environmental degradation, and creates multiple benefits.

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Agricultural Water Use Efficiency	0.1-0.8[3]		0.3-4.0
Urban Water Use Efficiency	1.2-3.1		2.5-6.0

Improve Operational Efficiency & Transfers

California's water system responds to our need to move water from where it occurs to where it will be used.

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Conveyance—Delta	0.1-0.6		1.2-17.2
Conveyance—Regional/Local			
System Reoperation			
Water Transfers			

Increase Water Supply

California's communities are finding innovative ways to generate new supplies.

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Conjunctive Management & Groundwater Storage	0.5-2.0		
Desalination – Brackish & Seawater	0.3-0.4		0.9-2.9
Precipitation Enhancement	0.3-0.6		0.2
Recycled Municipal Water	0.9-1.4		6.0-9.0
Surface Storage—CALFED[3]	0.1-1.1		0.2-7.8
Surface Storage—Regional/Local (under development)			

1. Additional information is found in Volume 2.
2. Value is Net Water to account for water reuse among agricultural water users.
3. Reflects cost allocation of annual water benefit which is not the total cost of the project.

Improve Water Quality

Improved water quality can directly improve the health of Californians and our ecosystem.

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Drinking Water Treatment and Distribution			1.4/year
Groundwater/Aquifer Remediation			20.0
Matching Quality to Use			0.1
Pollution Prevention			21.0
Salt and Salinity Management			>10.0
Urban Runoff Management			

Practice Resource Stewardship

We must protect other resources as we make water supplies available for other beneficial uses.

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Agricultural Lands Stewardship			5.3
Economic Incentives (Loans, Grants, Water Pricing)			
Ecosystem Restoration			
Forest Management[4]	0.1-0.4		0.3-0.8
Land Use Planning and Management			
Recharge Area Protection			
Water-dependent Recreation			
Watershed Management			0.5-3.6

Improve Flood Management

Strategy	MAF/year[1]	Potential Strategy Benefits	Accumulated Cost by 2030 ($ Billions[2])
Flood Risk Management			

4. Numbers are for Meadow Restoration only.

Find descriptions of 27 resource management strategies in Volume 2

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CALIFORNIA WATER PLAN | UPDATE 2009 19

Finance Planning
Relevance to Groundwater Content Enhancements

- Update 2013 will include a new financial planning feature that will be informed by the groundwater content enhancements

Water Plan Update 2009

A Foundation for
Update 2013 Finance Plan

Update 2013 Finance Plan

Implementing Update 2009

"California needs a water finance plan with stable, continuous funding from an array of revenue sources… The finance plan should recognize the critical role of public-private partnerships and the principle of beneficiary pays; include alternative revenue sources; and guide investment decisions based on sustainability indicators".

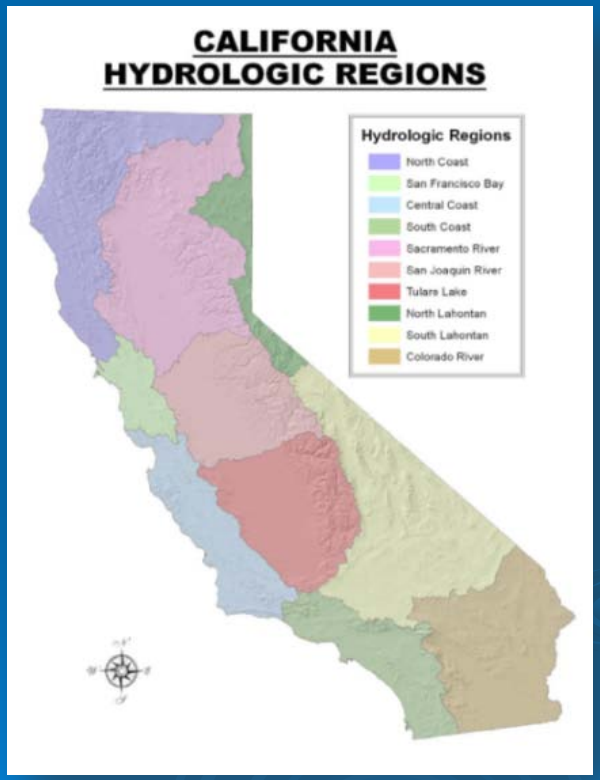
California Water Plan Update 2009

Water Plan Update Strategic Plan Relevance to Finance Plan

- Update 2005 Strategic Plan informed Proposition 84 language
- Update 2009 Strategic Plan informed IRWM financial assistance criteria
- Both will evolve into the basis for developing Update 2013 Finance Plan G*uiding Principles* and C*riteria for Prioritizing State Funding, Recommendations* and other sections
- High-level finance recommendations will be published in Update 2013 Strategic Plan

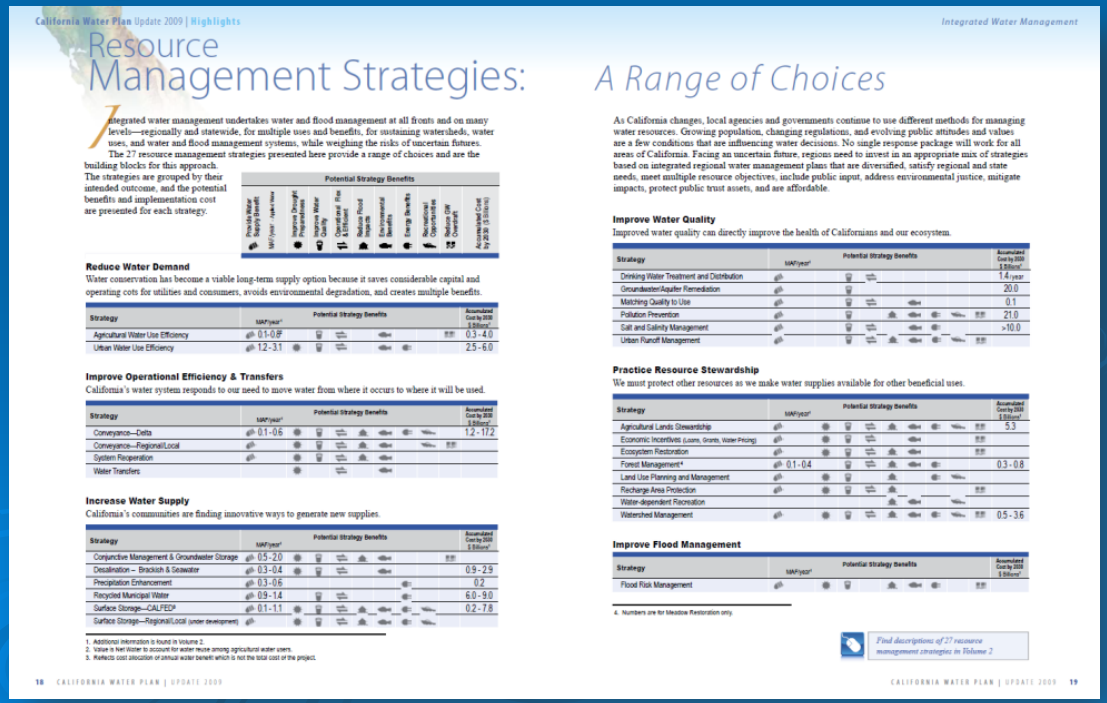
Regional Reports
Relevance to Finance Plan

- Articulation of information, data, challenges, opportunities and regional resource management objectives
- Funding proposals and priorities will be derived, in part, from regional reports
- Ensure regionally relevant solutions



Water Plan Update Resource Management Strategies
Relevance to Finance Plan

- Finance Plan policy and action recommendations will draw from menu of Resource Management Strategies
- Serves as one source of information for estimating statewide IWM costs through 2050



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Ways to Access Water Plan Information

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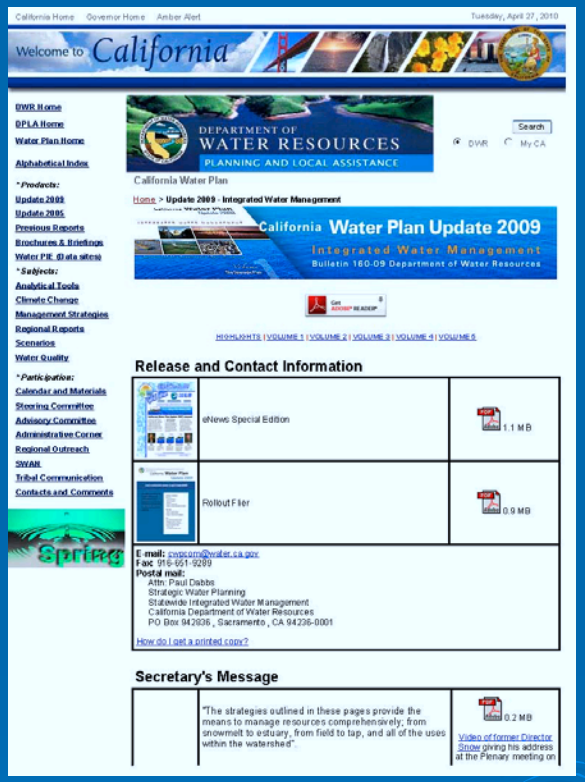

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