

# California **Water Plan** Highlights

INTEGRATED WATER MANAGEMENT



Update 2009 - Department of Water Resources

## California Water Plan Update 2009

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## Overview of Public Review Draft

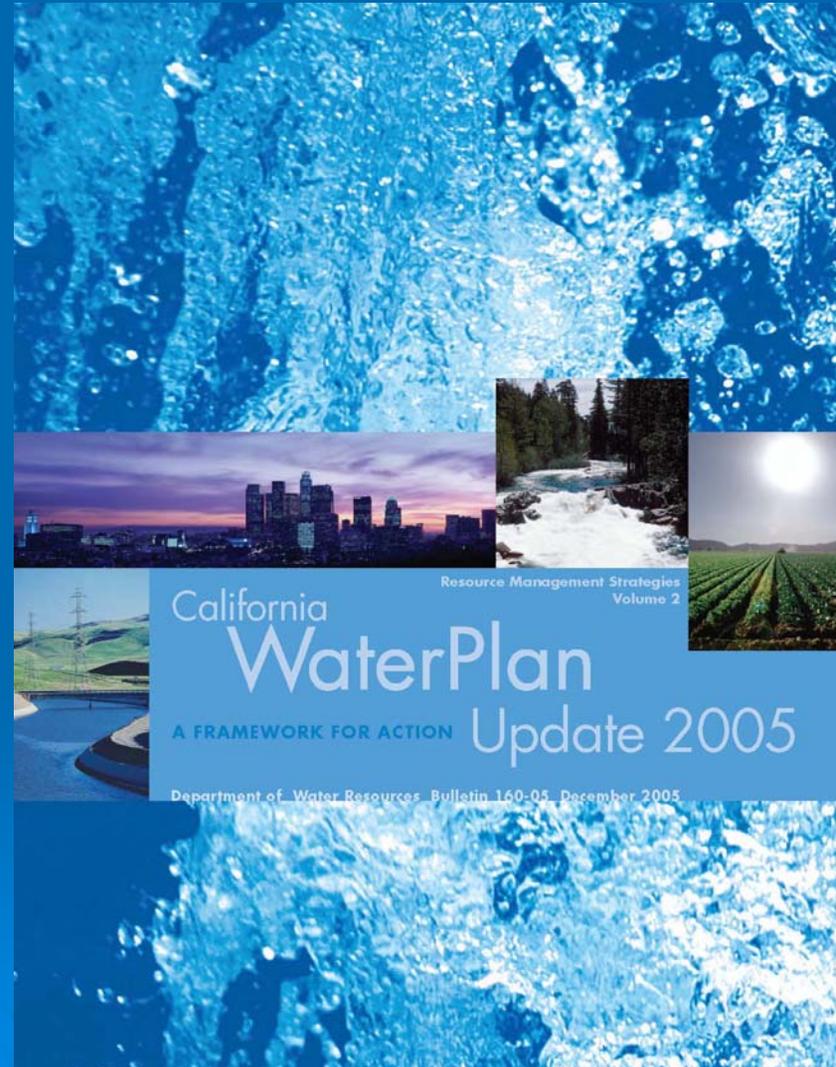
Climate Change TAG  
July 16, 2009

**Public Review Draft**

*January 14, 2009*

# The California Water Plan

- First published in 1957 as Bulletin 3
- Updated 8 times (Bulletin 160); last one in 2005
- DWR required by law (Water Code) to update the Water Plan every 5 years; next one in 2009
- Growing interest by Legislature and stakeholders
- Part of Governor's Strategic Growth Initiative
- Not a mandate & No appropriation



# Update 2009 – State's Blueprint Integrated Water Management & Sustainability

## VISION

- Public Health, Safety, Quality of Life
- Vitality, Productivity, Economic Growth
- Healthy Ecosystem, Cultural Heritage

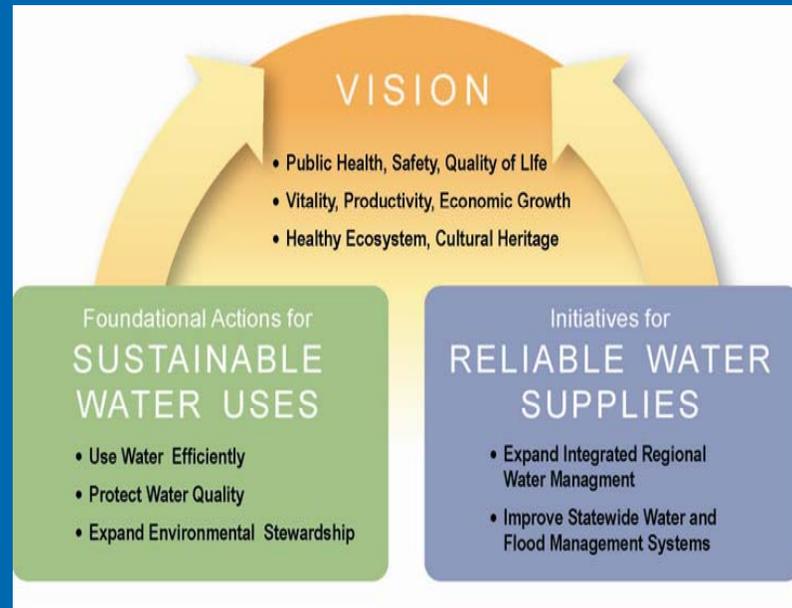
### Foundational Actions for **SUSTAINABLE WATER USES**

- Use Water Efficiently
- Protect Water Quality
- Expand Environmental Stewardship

### Initiatives for **RELIABLE WATER SUPPLIES**

- Expand Integrated Regional Water Management
- Improve Statewide Water and Flood Management Systems

# Update 2009 Features



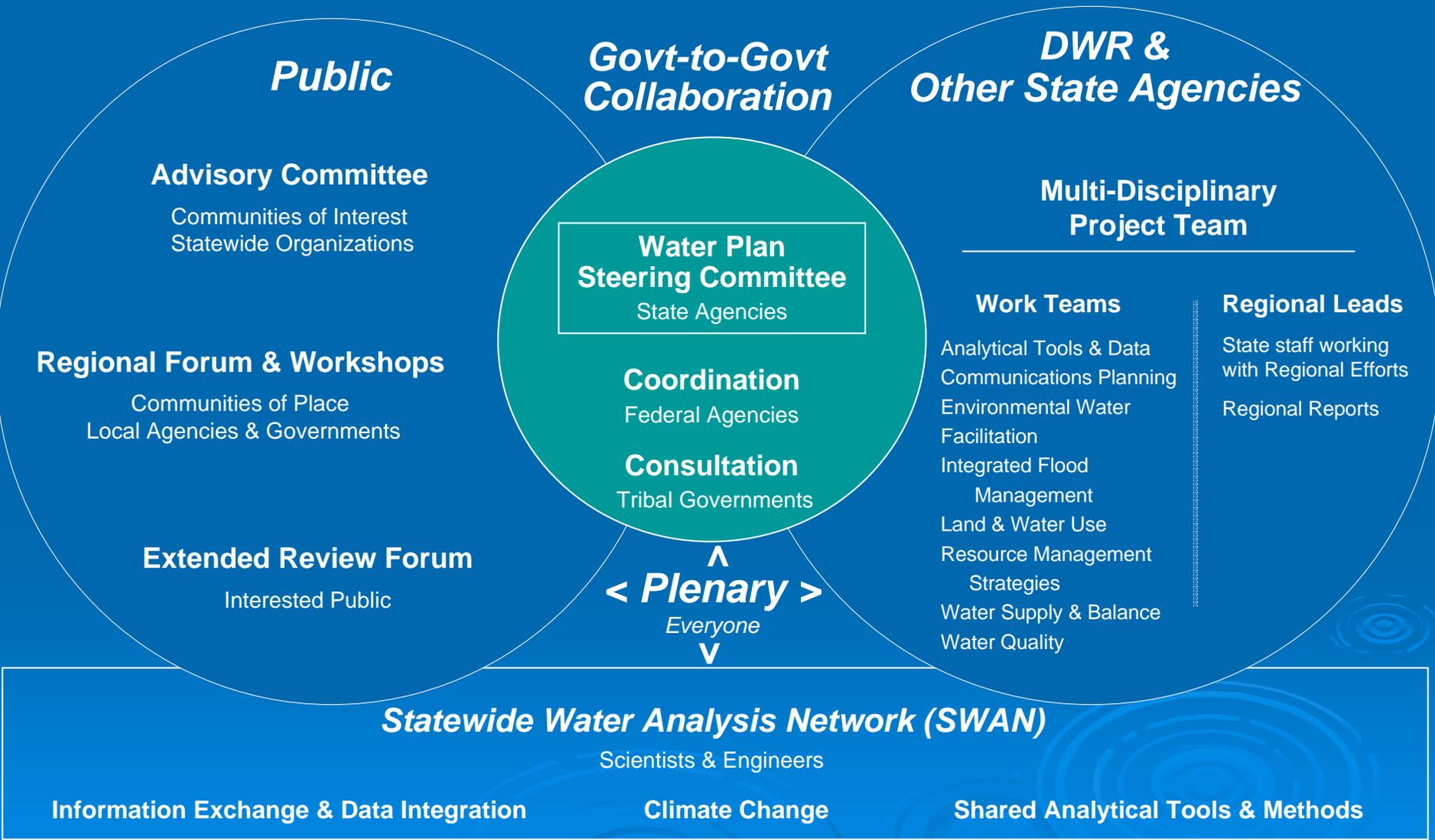
- Provides an investment guide for the water community with an array of strategies to achieve multiple goals & benefits.
- Integrates State government initiatives, objectives & strategies and offers ~100 near- and long-term actions to achieve them.
- Incorporates consideration of uncertainties, risks & resource sustainability into water & flood planning for the future.

# Update 2009 Features

- Incorporates strategies for Integrated Flood Management and climate adaptation & mitigation.
- Describes 27 resource management strategies to diversify regional water portfolios & increase regional self-sufficiency.
- Outlines new analytical methods and tools to plan for population growth & development patterns, climate change, economic change, and other uncertainties.
- Updates 12 regional reports.



# California Water Plan Update 2009 Process Guide



# 28-Month Collaboration Statistics

Mar 2007 – June 2009

Comparison w/  
Update 2005

100% of collaboration  
in  
50% of the time

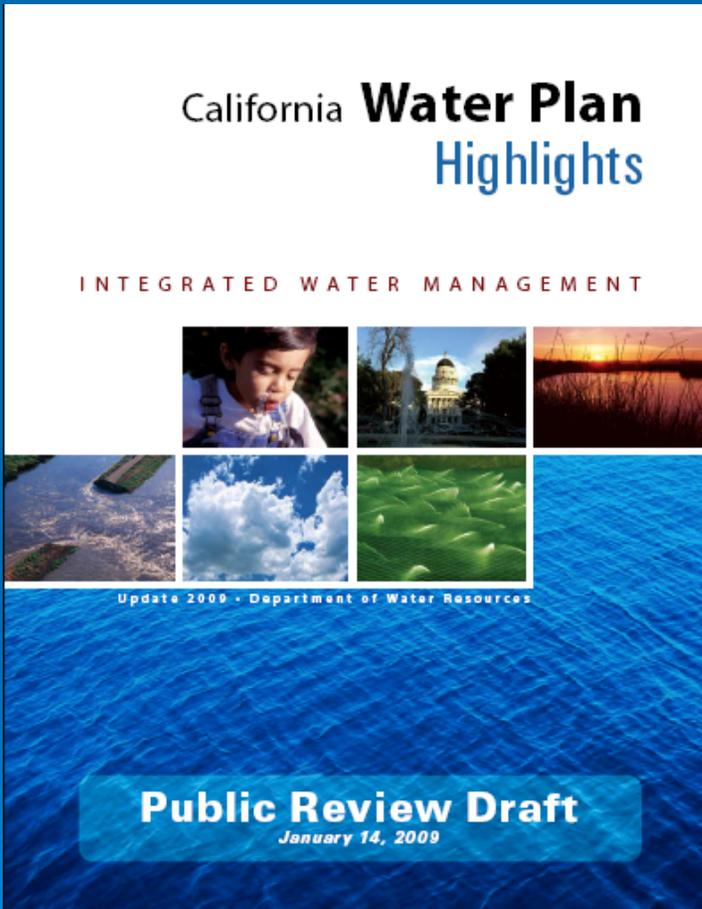
Meeting	Number	Person Hours
Steering Committee	13	1200
Advisory Committee	8	4531
Regional Workshops	33	6468
Mgmt Strategy Workshops	32	1603
All-Regions Forum	2	1928
Plenary	2	2586
SWAN Workshops	7	1690
Scenarios Workshops	3	182
Climate Change TAG	3	376
Tribal Communication Committee	12	770
Tribal Water Summit Planning	7	560
Tribal Water Plenary	8	1739
<b>Totals</b>	<b>130</b>	<b>23,633</b>

\* Not including briefings

# Water Plan Highlights

# Water Plan Update Organization

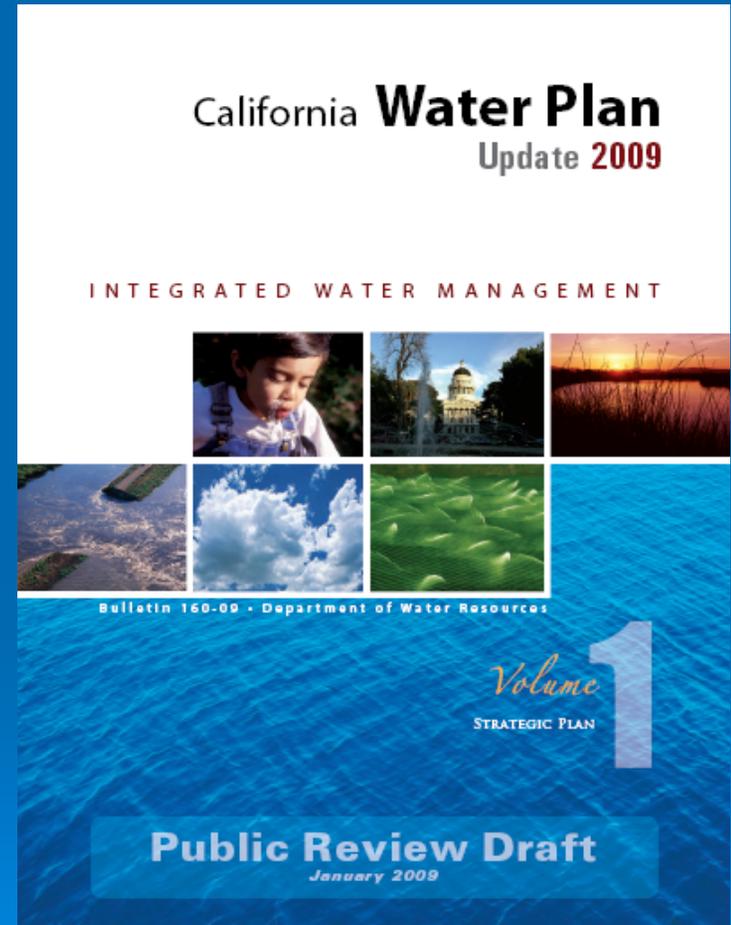
## Inside Front Cover



- Water Plan Highlights (with CD)
- Vol. 1 > The Strategic Plan
- Vol. 2 > 27 Resource Management Strategies
- Vol. 3 > 12 Regional Reports
- Vol. 4 > Reference Guide - *coming* (Online articles)
- Vol. 5 > Technical Guide - *coming* (Online documentation)

# Volume 1 --- The Strategic Plan

1. Introduction
2. **Imperative to Act**
3. Companion State Plans
4. **California Water Today**
5. Managing an Uncertain Future  
*Uncertainty, Risk & Sustainability*
6. **Integrated Data & Analysis**
7. Implementation Plan  
*13 Objectives & ~100 Related Actions*



# Imperative to Act to Keep Pace w/ Changes

## pages 4 - 5



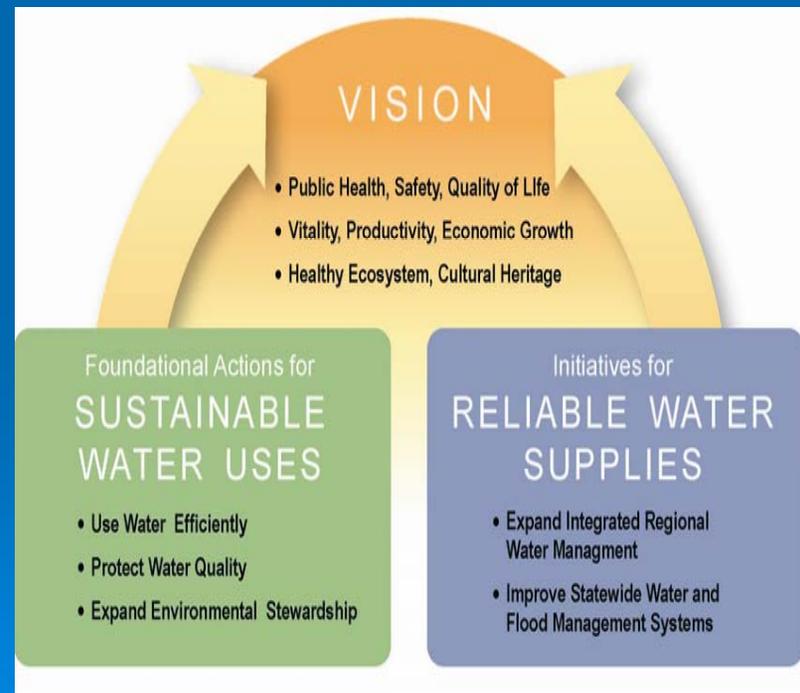
- Population growth
- Shift to permanent crops
- Delta & watersheds in decline
- Climate Change profoundly impacting water systems
- Aging water & flood systems challenged by legal remedies & regulatory protections
- Growing economic & societal consequences of declining water reliability and degraded quality of surface & groundwater supplies

# Imperative to Act to Keep Pace w/ Changes

## The *Entire System* –

water & flood management,  
watersheds & ecosystems

– has lost resilience and is  
changing in undesirable ways.



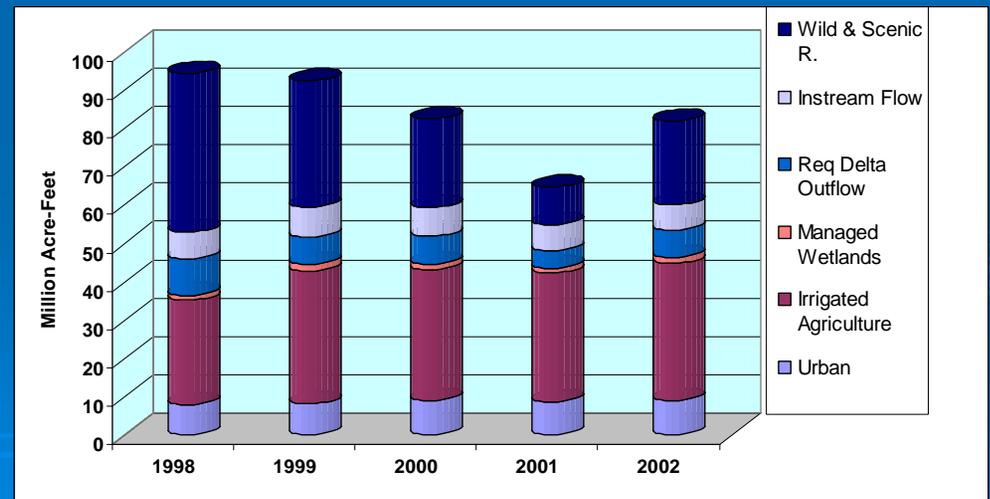
# CA Water -- Variable & Extreme

pages 6 - 7



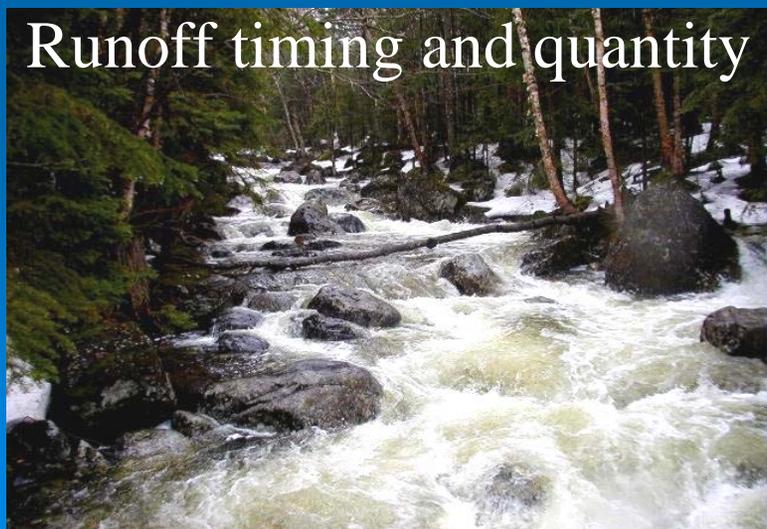
## Water Portfolios

80 data categories for 1998 - 2005



# Climate Change Increasing Stress on System

pages 8 - 9



# How Climate Change Impacts California's Water Resources



- *Reduced snowpack* impacting water supply and hydropower
- *Earlier snowmelt* increasing flood control portion of reservoir space
- *Higher water temperatures* degrading aquatic ecosystems
- *Rising sea level* threatening the Delta, bays, estuaries & coastline
  - destabilizing levees
  - increasing SW/GW salinity
- *Higher water demand* all sectors

# Strategic Plan Elements

double foldout 10A – 10D

➤ Desired future for CA water & Purpose of Water Plan

Vision & Mission

➤ Desired outcomes for the 2050 planning horizon

7 Goals

➤ Core values & philosophies

10 Guiding Principles

➤ Statements of intent / Focus on what & when

13 Objectives & 100 Actions

➤ Removing impediments & leveraging opportunities

9 Recommendations

# 13 Linked Objectives & 100 Related Actions

1. Expand integrated regional water management
2. Use and reuse water more efficiently
3. Expand conjunctive management of multiple supplies
4. Protect surface and groundwater quality
5. Expand environmental stewardship
6. Practice integrated flood management
7. Manage a sustainable California Delta
8. Prepare prevention, response & recovery plans
9. Reduce energy consumption of water systems & uses
10. Improve data & analysis for decision-making
11. Invest in new water technology
12. Improve Tribal water & natural resources
13. Ensure equitable distribution of benefits

# 3 Water Scenarios

## A Range of Considerations thru 2050

pages 12 - 13

### Many Factors

What will be California's water demands in 2050? The Water Plan looks at 80 factors that can affect water use. They fit into these categories. Assumptions about how these factors may change—using future scenarios—can help us plan for future water demands.



**Economic & Financial**



**Technological**



**Social Practices**



**Natural Systems**



**Institutional & Political**

### Water Policy

- **Current Trends** – Recent trends continue into the future
- **Blueprint Growth** – Coordinated planning & development
- **Expansive Growth** – More resource intensive conditions

# 27 Resource Management Strategies

## A Range of Choices [ pages 14 – 15 ]

### Reduce Water Demand

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

### Improve Operational Efficiency & Transfers

- Conveyance – Delta
- Conveyance – Regional/Local
- System Reoperation
- Water Transfers

### Increase Water Supply

- Conjunctive Management & Groundwater Storage
- Desalination – Brackish & Seawater
- Precipitation Enhancement
- Recycled Municipal Water
- Surface Storage – CALFED
- Surface Storage - Regional/Local

### Improve Flood Management

- Flood Risk Management

### Improve Water Quality

- Drinking Water Treatment and Distribution
- Groundwater/Aquifer Remediation
- Matching Quality to Use
- Pollution Prevention
- Salt & Salinity Management
- Urban Runoff Management

### Practice Resource Stewardship

- Agricultural Lands Stewardship
- Economic Incentives (Loans, Grants, and Water Pricing)
- Ecosystem Restoration
- Forest Management
- Land Use Planning & Management
- Recharge Areas Protection
- Water-Dependent Recreation
- Watershed Management

# Variable Conditions & Unique Responses

## 12 Regional Reports

pages 16 - 17



- Setting
- Regional Water Conditions
- Relationship with Other Regions
- Regional Water and Flood Planning and Management
- Looking to the Future
- Water Portfolios 1998-2005
- Selected References

# Recommendations [ page 19 ]

1. Implement Water Plan's actions
2. **Need finance plan with stable/continuous funding**
3. Ecosystem health & water reliability are co-equal
4. **State govt leads, assists & oversees regions**
5. State & federal govt lead & support research for climate adaptation and mitigation
6. **Improve coordination of land use policies, economic development & water/flood/resource management**
7. Renovate & improve aging water, wastewater & flood infrastructure
8. **Articulate & update roles, authorities & responsibilities**
9. Increase public water awareness

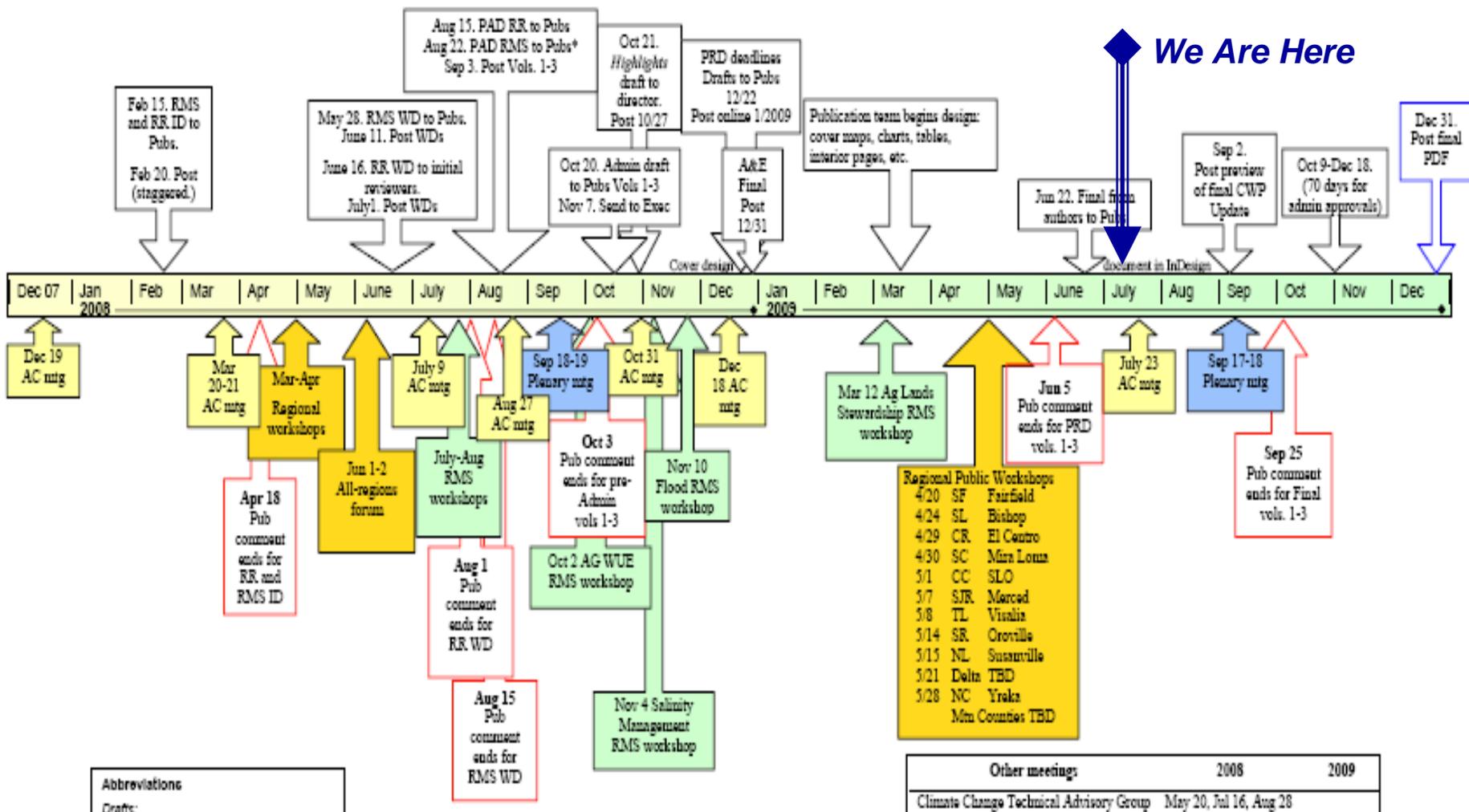
# What's Next

# Document & Venue Schedule

## Documents Above & Venues Below Timeline

### 2008

### 2009



# Ways to Access Water Plan Information

- Visit the Water Plan Web Portal [www.waterplan.water.ca.gov](http://www.waterplan.water.ca.gov)

**California Water Plan 2009**  
**Wednesday's Update** Feb. 27, 2008

Subscribe | Comments/Suggestions | Unsubscribe

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.

**Regional Workshops get under way next week in Southern California**

If you plan to attend, please don't forget to RSVP!

- Tuesday, March 4, Desert Hot Springs. Meeting materials, including the Initial Draft Regional Report for the Colorado River Region. [can be found here.](#)
- Wednesday, March 5, Apple Valley. Meeting materials, including the Initial Draft Regional Report for the South Lahontan Region. [can be found here.](#)
- Thursday, March 6, San Diego. Meeting materials, including the Initial Draft Regional Report for the South Coast Region. [can be found here.](#)

DWR encourages attendance by the public and representatives of water agencies and associations, local, state, tribal (recognized and non-recognized), federal government, watershed and community groups, and conservationists. Eight more Regional Workshops will be held across the state this year. [You can find more information about them here.](#)

**Free Delta Vision workshop to be held in Suisun City**

The Water Education Foundation is offering a free Delta Vision Workshop on Friday, March 7, in Suisun City. The free workshop will run from 8:45 a.m. to 5 p.m., and will outline the Delta Vision plan's recommendations and what they mean to you. Not only is the workshop free, organizers are giving all registered attendees a free box lunch. [Learn more here.](#)

**DV Blue Ribbon panel will meet tomorrow and Friday**

The Delta Vision Blue Ribbon Task Force will meet tomorrow and Friday in West Sacramento to continue developing a strategic plan to implement its vision for the California Delta. The meeting will focus on the Delta as an estuarine ecosystem, water and governance and strategic finance. [Read more.](#)

**RAND releases two water management studies**

The RAND Corporation has released two studies detailing uncertainties about future water-management. The first is "Presenting Uncertainty About Climate Change to Water-Resource Managers: A Summary of Workshops with the Inland Empire Utilities Agency." [Find it here.](#) The other report is "Preparing for an Uncertain Future Climate in the Inland Empire: Identifying Robust Water-Management Strategies." [Find it here.](#)

Click on links below for more information.

Upcoming Meetings | Water Plan Web site



- Subscribe to Water Plan eNews a weekly electronic newsletter [www.waterplan.water.ca.gov/enews](http://www.waterplan.water.ca.gov/enews)

California Home | Governor Home | Amber Alert | Thursday, January 22, 2009

Welcome to **California**

DEPARTMENT OF WATER RESOURCES  
PLANNING AND LOCAL ASSISTANCE

California Water Plan  
Home > Update 2009 - Integrated Water Management

\* Products:  
Update 2009  
Update 2005  
Previous Reports  
Brochures & Briefings  
Water Plan (Data sites)

\* Subjects:  
Analytical Tools  
Climate Change  
Management Strategies  
Regional Reports  
Scenarios  
Water Quality  
Participation  
Calendar and Materials  
Advisory Committee  
Administrative Corner  
Regional Outreach  
SIWAN  
Tribal Communication  
Contacts and Comments

Get ADOBE® READER®

HIGHLIGHTS | VOLUME 1 | VOLUME 2 | VOLUME 3 | VOLUME 4 | VOLUME 5 | A&E | Comments | Filter

**Important Note:**

In the public review draft, we use PLACEHOLDER in the text for two reasons:  
(1) to indicate tables, figures or boxes that are placed at the end of the chapter, or  
(2) for items that are still being developed - for example a table or chart that will be added when the needed data are available.

We will hold additional workshops in February and March to supplement the data and analytical information. We will also hold at least 12 regional workshops from mid-April through May to present the public draft as well as new supplemental information and hear public comments in person.

**Rollout Schedule**

Rollout and Comment Schedule Filer

DWR Aquacast

DWR has been crafting and updating the California Water Plan for 50 years. Join Kamyar Gulvechi, Manager of Statewide Integrated Water Management as he explains how the 2009 update is unique, and how the public can get involved in developing the Water Plan.

Formats: [MP3](#) | [Text](#)

# Contact Information

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