California Water Plan Update

Advisory Committee Meeting
January 20, 2005
Key Purposes of Water Plan

- Focus California Water Policy
- Be a Useful Document for Water Managers
  - Current supplies and water uses and potential future demands
  - Information on water management strategies that water managers can use when developing plans and solutions
Strategic Plan Overview

- Vision
- Mission
- Goals
- Recommendations
- Implementation Plan
Water Plan Vision

California’s water resource management preserves and enhances public health and the standard of living for Californians; strengthens economic growth, business vitality, and the agricultural industry; and restores and protects California’s unique environmental diversity.
Water Plan Mission

To develop a strategic plan that guides State, local, and regional entities in planning, developing, and managing adequate, reliable, secure, affordable, and sustainable water of suitable quality for all beneficial uses.
Water Plan Goals

Intended Outcomes

- State government supports good water planning and management through leadership, oversight, and public funding.
- Regional efforts play a central role in California water planning and management.
- Water planning and urban development protect, preserve, and enhance environmental and agricultural resources.
- Natural resource and land use planners make informed water management decisions.
- Water decisions are equitable across all communities.
14 Broad recommendations addressing approaches to water management, state government reform, funding, research, data collection and analytical tools, and social equity.
Implementation Plan

- Action Plan for each Recommendation
  - Near-term actions
  - Long-term comprehensive actions
- Intended Outcomes
- Resource Assumptions
- Implementation Challenges
- Performance Measures
Framework for a Sustainable and Reliable Water Supply in 2030

Vision

Foundational Principles for Sustainability

Initiatives for Reliability

Vital Economy
Healthy Environment
High Standard of Living

Enhance Water Infrastructure

Practice Integrated Regional Water Management

Use Water Efficiently

Protect Water Quality

Support Environmental Stewardship

Vision

Foundational Principles for Sustainability

Initiatives for Reliability
Foundational Principle
Use Water Efficiently

- Increase levels of urban and agricultural water use efficiency
- Increase recycled municipal water and expand its uses
- Reoperate water facilities to improve their operation and efficiency
- Facilitate environmentally and economically sound transfers to avoid regional shortages
Foundational Principle
Protect Water Quality

- Protect surface waters and aquifers from contamination
- Explore new treatment technologies for drinking water and groundwater remediation
- Match water quality to use
- Improve management of urban and agricultural runoff
- Reduce and eliminate groundwater overdraft
- Improve watershed management
Foundational Principle
Support Environmental Stewardship

- Incorporate ecosystem restoration with water planning and land use planning
- Restore and maintain the structure and function of aquatic ecosystems
- Minimize alteration of ecosystems by water management actions
- Protect public trust resources
- Improve watershed management
- Integrate flood management with water supply management
Initiative 1
Enhance Water Infrastructure

- Maintain aging facilities
- Implement the CALFED program including:
  - Conveyance improvements
  - New storage
- Improve flood management
- Sustain the Sacramento-San Joaquin Delta

Enhance Water Infrastructure
Initiative 2
Practice Integrated Regional Water Management

- Foster regional partnerships
- Develop regional integrated water management plans
- Diversify regional water portfolios using mix of strategies
Essential Support Activities

- Reform State government for effective leadership and efficiency
- Clarify State, federal and local roles & responsibilities
- Develop funding strategies & clarify role of public investments
- Increase tribal participation and access to funding
- Ensure Environmental Justice across all communities
Essential Support Activities (cont.)

- Adapt for global climate change impacts
- Invest in new water technology
- Improve water data management and analysis
- Increase scientific understanding
New Features

- Water Portfolios

- Regional Reports
  - Setting, challenges, goals, planning efforts & water portfolio
New Features (continued)

- **Multiple Future Scenarios**
  - Plausible yet different futures to plan for uncertainties & risks

- **25 Resource Management Strategies**
  - Ways to reduce demands, improve system efficiency, augment supplies, improve WQ & sustain resources

- ✔ Demand Reduction
- ✔ Operational Efficiency & Redistribution
- ✔ Supply Augmentation
- ✔ Quality Improvement
- ✔ Resource Stewardship
Resource Management Strategies

Demand Reduction
- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

Operational Efficiency & Redistribution
- Conveyance
- System Reoperation
- Water Transfers

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

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

Resource Stewardship
- Agricultural Lands Stewardship
- Economic Incentives (Loans, Grants, and Water Pricing)
- Ecosystem Restoration
- Floodplain Management
- Recharge Areas Protection
- Urban Land Use Management
- Water-Dependent Recreation
- Watershed Management
Range of Water Supply Benefits

- Urban WUE: Minimum 1.1, Maximum 2.3
- Recycled Municipal Water: Minimum 0.5, Maximum 2.0
- Surface Storage - CALFED: Minimum 0.9, Maximum 1.4
- Agricultural WUE: Minimum 0.05, Maximum 1.0
- Desalination: Minimum 0.3, Maximum 0.6
- Conveyance: Minimum 0.3, Maximum 0.5
- Precipitation Enhancement: Minimum 0.3, Maximum 0.4
Water Plan Organization

- Vol. 1 > Strategic Plan
- Vol. 2 > 25 Resource Management Strategies
- Vol. 3 > 12 Regional Reports
- Vol. 4 > Reference Guide (articles)
- Vol. 5 > Technical Guide (documentation)
Phase 1 Production Schedule

- Administrative Draft: September 2004
- Public Review Draft: February 2005
- Public Hearings: Spring 2005
- Final Water Plan: June 2005