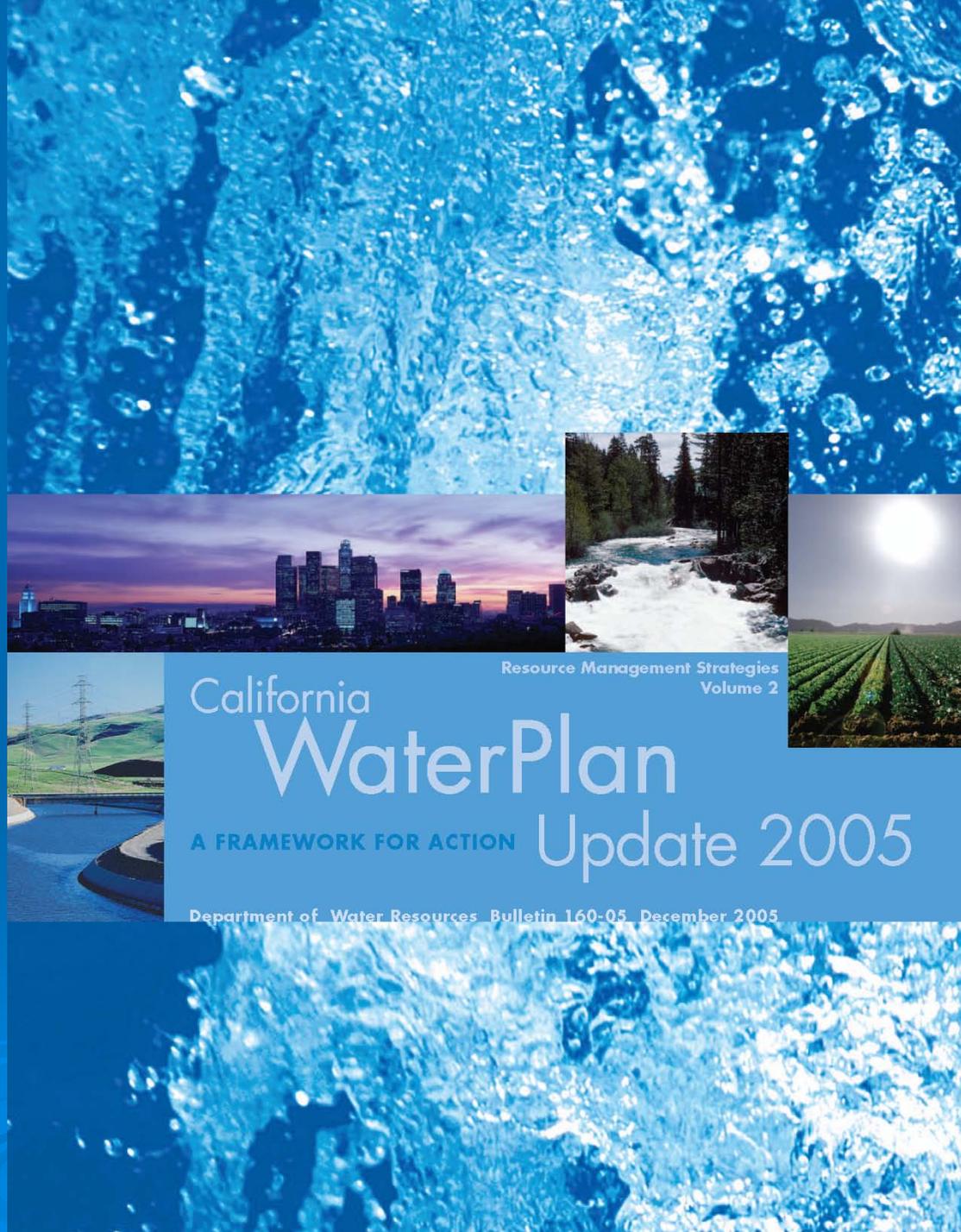


California Water Plan Update 2009

Resource Management Strategies Overview

All-Regions Forum
Ontario
September 17-18, 2007



Resource Management Strategies
Volume 2

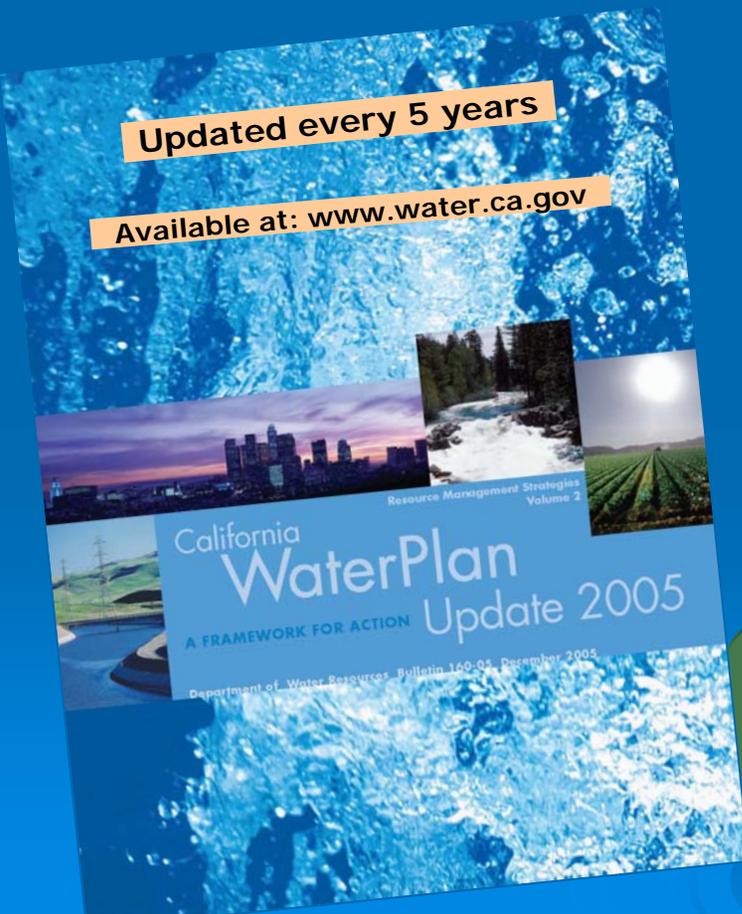
California WaterPlan

A FRAMEWORK FOR ACTION Update 2005

Department of Water Resources Bulletin 160-05 December 2005

Integrated Regional Water Management

A key initiative of the California Water Plan



Vital Economy
Healthy Environment
High Standard of Living

Implement
Integrated
Regional Water
Management

Improve
Statewide Water
Management
Systems

Use
Water
Efficiently

Protect
Water
Quality

Support
Environmental
Stewardship



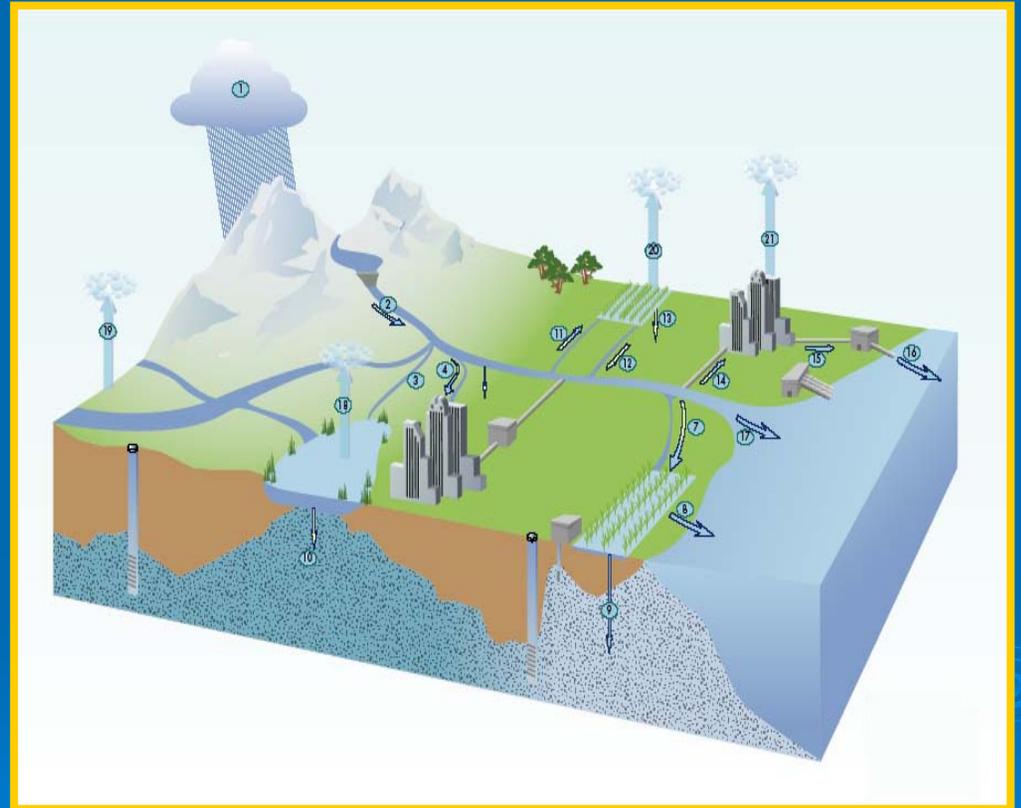
Initiative 1

Implement Integrated Regional Water Management

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

Integrated Regional Water Management

- Expands solution opportunities
- Integrates Resources Management Decision-making
- Reduces Costs and Maximizes Value
- Provides for Sustainability



Resource Management Strategies

Reduce Water Demand

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

Improve Operational Efficiency & Transfers

- Conveyance
- 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 Water Quality

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

Practice 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

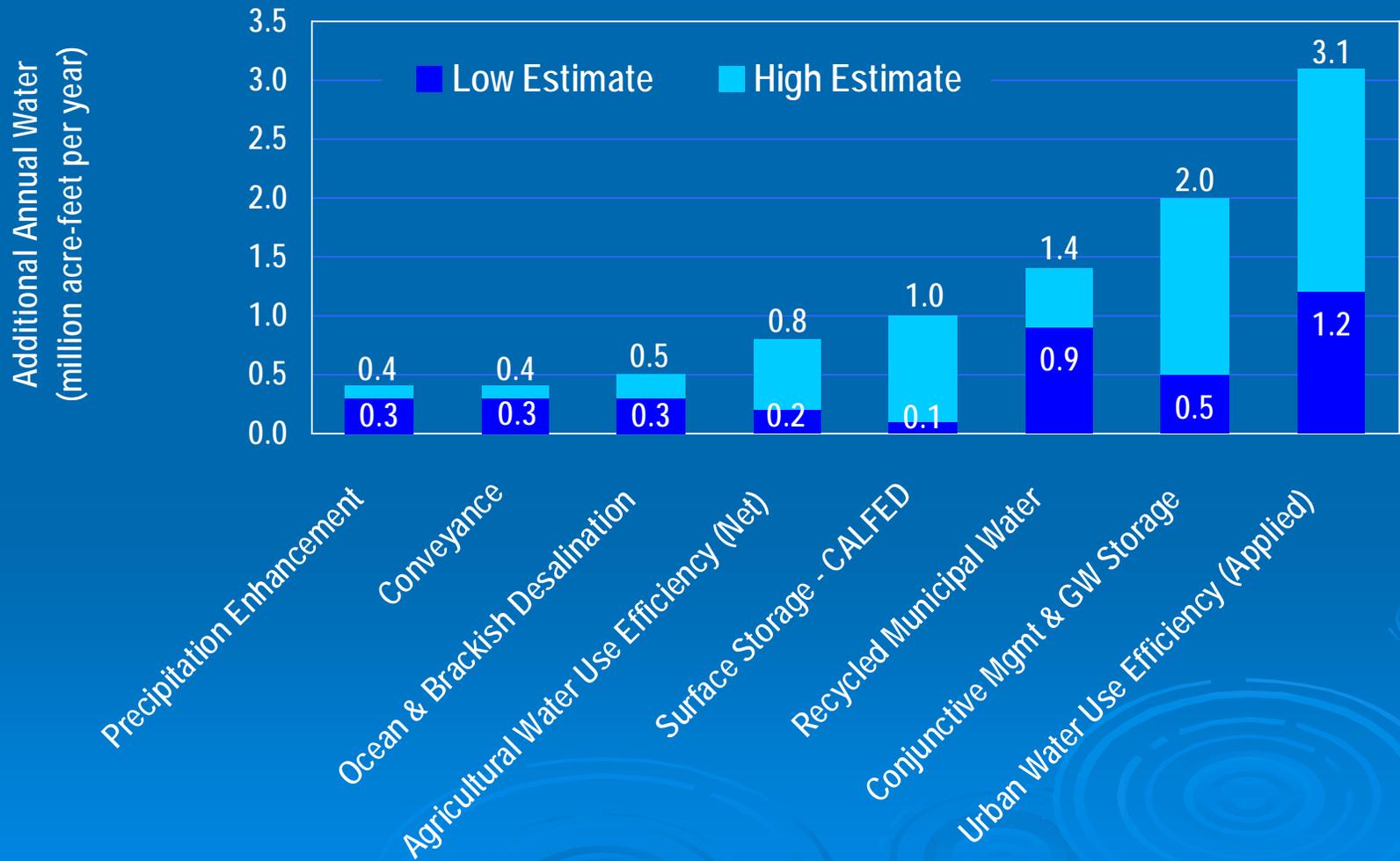
Strategy Summary Table – Benefits & Costs

Workbook –Page 15

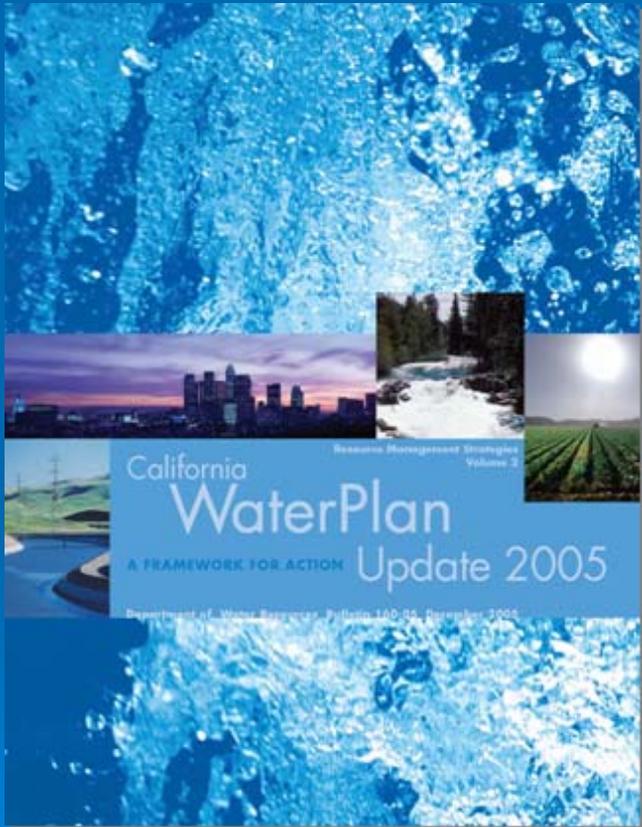
Table 1 - Strategy Summary Table

Resource Management Strategies	Water Management Objectives									Cumulative Cost of Option by 2030 (\$ Billion) See narratives for backup
	Provide Water Supply Benefit	Improve Drought Preparedness	Improve Water Quality	Operational Flex & Efficient	Reduce Flood Impacts	Environmental Benefits	Energy Benefits	Recreational Opportunities	Reduce GW Overdraft	
Reduce Water Demand										
Agricultural Water Use Efficiency	●	●	●	●		●	●		●	0.3 – 4.0
Urban Water Use Efficiency	●	●	●	●		●	●			2.5 - 6.0
Improve Operational Efficiency & Transfers										
Conveyance	●	●	●	●	●	●	●	●	●	0.2 – 2.4
System Reoperation	●	●	●	●	●	●		●		
Water Transfers		●	●	●		●				
Increase Water Supply										
Conjunctive Management & Groundwater Storage	●	●	●	●	●	●			●	1.5 – 5.0
Desalination – Brackish	●	●	●	●					●	0.2 – 1.6
– Seawater	●	●	●	●					●	0.7 – 1.3
Precipitation Enhancement	●	●					●			0.2
Recycled Municipal Water	●	●	●	●		●	●	●	●	6.0 – 9.0
Surface Storage – CALFED	●	●	●	●	●	●	●	●	●	0.2 – 5.6
Surface Storage – Regional/Local	●	●	●	●	●	●		●	●	
Improve Water Quality										
Drinking Water Treatment and Distribution			●							17.0 – 21.0
Groundwater/Aquifer Remediation	●	●	●						●	20.0

Range of Additional Water by 2030 for Eight Resource Management Choices

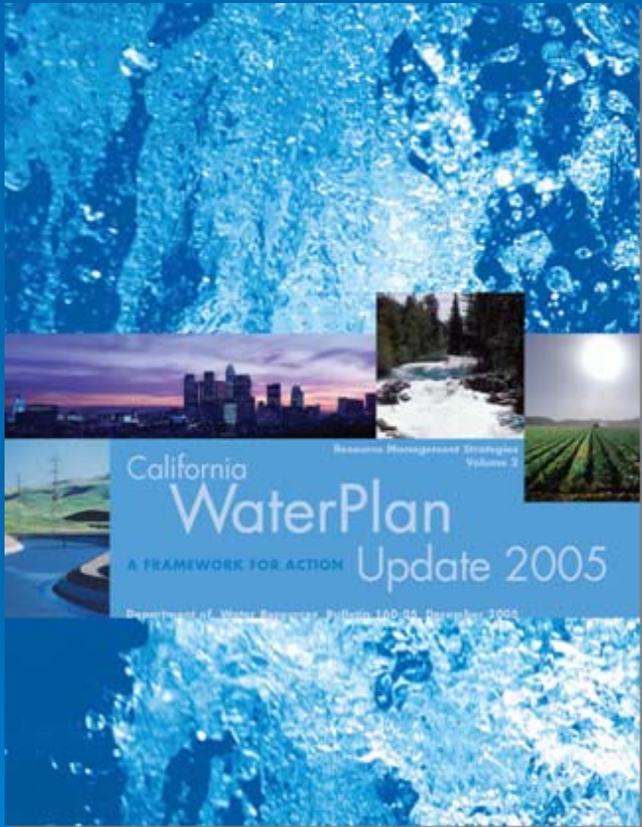


Water Plan Update Organization



- Introductory Video (8-minutes)
- Water Plan Highlights (with CD & DVD)
- Vol. 1 > Strategic Plan
- **Vol. 2 > 25 Resource Management Strategies**
- Vol. 3 > 12 Regional Reports
- Vol. 4 > Reference Guide (60+ online articles)
- Vol. 5 > Technical Guide (Online documentation)

Volume 2 > 25 Resource Mgmt Strategies Outline for Narratives



- Strategy Definition
- Current level of implementation
- Additional benefits by 2030
- Cost of additional implementation
- Issues & implementation challenges
- Recommendations to reduce challenges to implement more

Discussion

Regional Mix of Strategies

Other Strategies

Implementation Barriers

Drivers of Change

