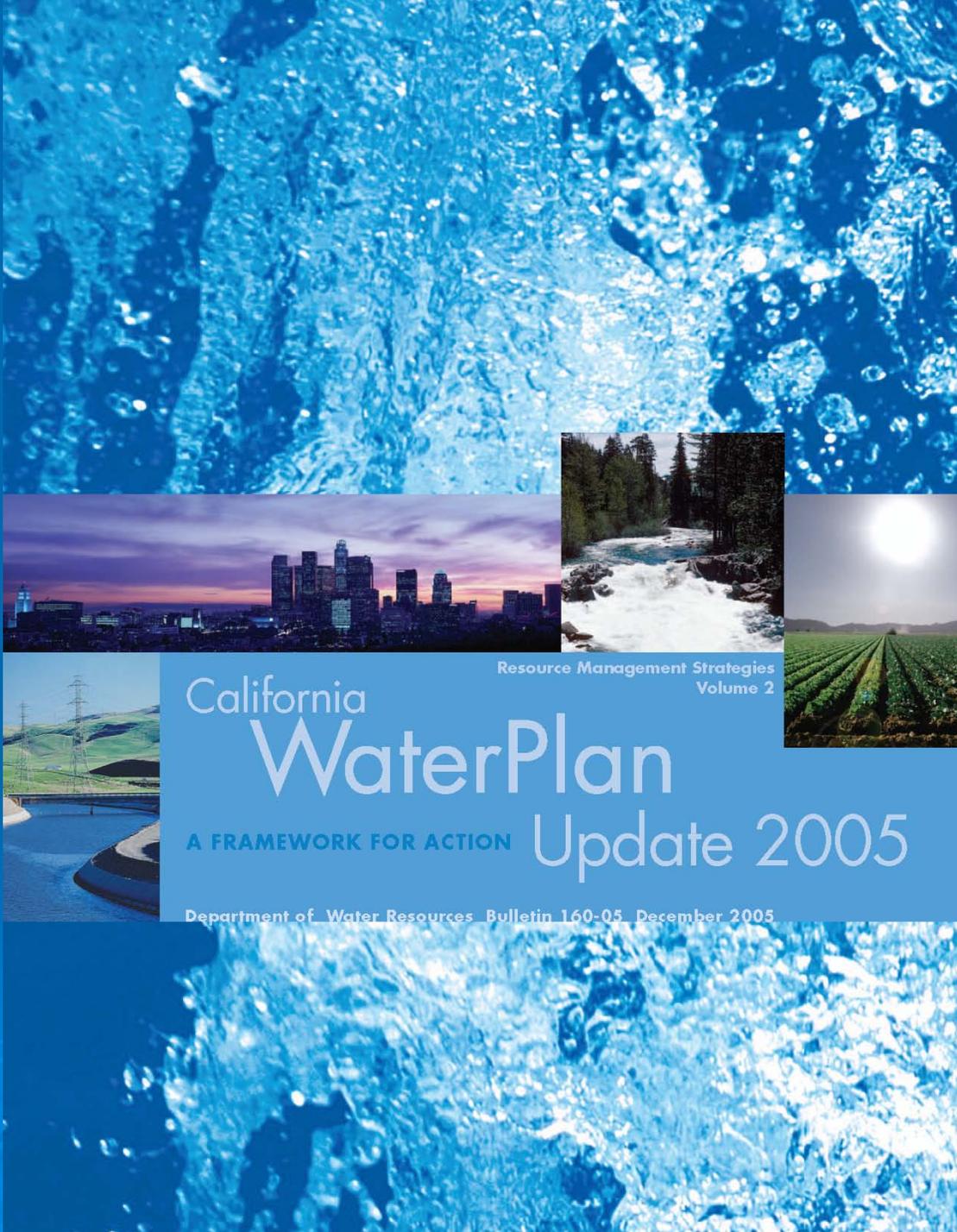


California Water Plan Update 2009

Future Scenarios Factors & Narratives

2008 Regional Workshops



Resource Management Strategies
Volume 2

California WaterPlan

A FRAMEWORK FOR ACTION Update 2005

Department of Water Resources Bulletin 160-05 December 2005

Nov. 2007 Scenario Workshop

Worked on Categories & Factors of Uncertainty

Uncertainty Category	2009 Scenario Factors	
Economic and Financial (E/F)	Total Population	
	Per Capita Income	
	Total Commercial Activity	
	Commercial Activity Mix	
	Total Industrial Activity	
	Industrial Activity Mix	
	Energy Costs	
	Irrigated Crop Area - Irrigated land area	
	Irrigated Crop Area - Multi-cropped land area	
	Irrigated Crop Area - Permanent crop land area	
	Irrigated Crop Area - Seasonal crop land area	
	Availability of funding for water management and development	
	Institutional and Political (I/P)	Population Density (Inst / Political)
		Population Distribution (Inst / Political)
Passive Conservation (Inst/Political)		
Drinking Water Standards		
Irrigated Crop Area (Institutional/Political)		
Irrigation technology use		
Water Price - Rate Structure		
Water Price - Cost Recovery		
Managed wetlands - Irrigated land area		
Private wetlands - Irrigated land area		
Instream flow requirements / objectives		
Floodplain development		
Flood threat recognition		
Flood requirements		
Urban Runoff Regulations		
Ag Discharge Requirements		
Regulation of Delta Exports		
Colorado River Agreements (Inst/Political)		
Endangered species listing		
Natural System (NS)	Temperature variability	
	Temperature trends	
	Precipitation variability	
	Precipitation trends	
	Snowpack/melt (intermediate factor)	
	Sea-level rise	
	Colorado River flows	
Extent of invasive species		
Resilience of endangered aquatic species		
Technological (Tech)	Membrane technology innovation	
	Groundwater injection technology innovation	
	Water use technology innovation	
	Flood system integrity	
	Infrastructure performance	
Cultural Practices (Cul)	Demand for water-based recreation	
	Population Density (Cultural)	
	Population Distribution (Cultural)	

- Organized factors by category
 - Economic and Financial
 - Institutional and Political
 - Natural System
 - Technological
 - Cultural Practices

Dec. 2007 Water Plan Advisory Committee

Worked on Scenario Narratives

1. Further refined list of scenario factors
2. Identified key factors for each "uncertainty category"
3. Outlined 3 scenarios narratives for future conditions representing
 - "Current Trends"
 - "Optimistic Outlook"
 - "Challenging Conditions"

Scenarios Reflect Different Concerns and Hopes of Advisory Committee Members

"OPTIMISTIC OUTLOOK" scenarios

- "Optimal Multiple Benefits"
- "Eureka!"
- "Native Control"
- "Blue Skies"

Draft Assumptions & Estimates report includes example narratives.

➤ *CHALLENGING CONDITIONS" scenarios*

- "Cascading Catastrophes"
- "Armageddon"
- "World Falls Apart"
- "Gloom and Doom"

Next Steps on Scenarios

- Refine scenarios narratives using comments on Draft Assumptions and Estimates Report
- Work through SWAN to refine scenario quantification using the WEAP model
- Initial scenario quantification for Update 2009 described in Public Review Draft (end 2008)

Reference Information

- Draft Assumptions and Estimates for Update 2009
 - <http://www.waterplan.water.ca.gov/cwpu2009/ae>
 - Includes narratives for 3 scenarios

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