

California Water Plan Update 2009

Volume 1 The Strategic Plan

Chapter 1 Introduction

Chapter 1 Introduction outlines the process for preparing California Water Plan Update 2009 and its new features. It also explains the organization of all five volumes of Update 2009 and its Highlights brochure.

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Chapter 2 Imperative to Act

Chapter 2 Imperative to Act lays out a roadmap for what California needs to do now to ensure that we have enough safe and clean water through year 2050 for California's cities and towns, farms and businesses, and plants and animals when and where they need it. It describes the features of the roadmap – the themes of this water plan, the elements of its strategic plan, and the key policy recommendations. The details of the strategic plan and recommendations are part of the implementation plan in Chapter 7.

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Chapter 3 Companion State Plans

NOTE: This draft of Chapter 3 is a work-in-progress placeholder that will be expanded and refined in conjunction with the Water Plan's State Agency Steering Committee.

Chapter 3, Companion State Plans reflects the reality that Water Plan Update 2009 is not merely the Department of Water Resources' water plan—it is the state's water plan. It is the product of collaboration by many State agencies and was developed alongside, and informed by, numerous planning processes and documents. In light of increasing risks and uncertainties, water managers must consider an ever broader range of resource management issues, competing water demands, new approaches to water supply reliability, and new ways of financing. This Water Plan update recognizes that an appreciation of companion State programs and policies is essential to better understand the possibilities and constraints for water managers.

This chapter begins with an overview of institutions that govern water in California and describes the role of the Water Plan State Agency Steering Committee to help make the California Water Plan a more comprehensive planning document. We then introduce the companion State plans, those plans and programs by State agencies that have a direct connection with the Water Plan. It shows how Companion

state plans were used to develop and augment content in the Water Plan, including the recommendations in Chapter 2 and the objectives and related actions in Chapter 7.

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Chapter 4 California Water Today

Chapter 4 California Water Today describes California's diverse communities and environment and the impediments that challenge us in meeting all our water demands. Meanwhile, we are already seeing the effects of climate change on hydrology (snowpack, river flows), storm intensity, temperature, winds, and sea levels. This chapter discusses how California's policy-makers and water communities are finding ways to break down those barriers through integrated planning and management, stewardship and sustainable practices, partnerships, legislation, and funding. Finally, this chapter recounts the many facets of California's water rights, usage, and allocation.

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Chapter 5 Managing for an Uncertain Future

NOTE: Chapters 5 and 6 are snapshots of works in progress that still need to be coordinated after modeling is completed and response packages have been prepared.

Chapter 5, Managing for an Uncertain Future, is based on the need for decision-makers, water managers, and planners to use the best available data and analytical tools in planning for California's water future in the face of many uncertainties and risks. It provides examples of uncertainties and discusses the need to consider risks in planning for a more sustainable future. The chapter presents an approach for these evaluations and examples of what was learned during preparation of this Water Plan Update on the types of investments that may be useful for a more sustainable future.

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Chapter 6, Integrated Data and Analysis, highlights key actions needed to improve water resources information and analysis by state government, particularly DWR, and by the many other research institutions, and federal, regional, and local water management entities. This Chapter is organized into the following sections.

- Purpose and motivation for improving our technical infrastructure to support water management decisions.
- Summary of several recent efforts that have suggested specific actions needed to improve our technical capabilities.
- Description of existing technical limitations and challenges.
- Critical activities that support a long term vision for improving water resources information and analysis.
- Description of the analytical approach applied by DWR for Update 2009 to quantify future water management conditions and evaluate alternative water management strategies.

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	Objective 3 – Advance and expand conjunctive management of multiple water supplies to prepare for future droughts and climate change.
	Objective 4 – Protect and restore surface water and groundwater quality to safeguard public and environmental health and secure California’s water supplies for their intended uses.
	Objective 5 – Promote, improve, and expand ecosystem stewardship to sustain the environment and water and flood management systems.
	Objective 6 - Promote and practice Integrated Flood Management to provide multiple benefits for better emergency preparedness and response, higher flood protection, more sustainable flood and water management systems, and enhanced floodplain ecosystems.
	Objective 7 – Practice sustainable management of the California Delta with the Delta ecosystem and a reliable water supply for California as co-equal goals and by recognizing the Delta as a unique and valued area.
	Objective 8 – Prepare response plans for floods, droughts, and catastrophic events to help residents and communities make decisions that reduce the consequences of these events when they occur.
	Objective 9 – Reduce the energy consumption of water and wastewater management systems to mitigate greenhouse gas emissions.

- Objective 10 - Improve and expand monitoring, data management, and analysis to support decision-making in light of uncertainties that support Integrated Regional Water Management and statewide flood and water resources management systems.
- Objective 11 - Identify and fund focused research on new water technology to help carry out water programs and better manage water systems.
- Objective 12 – Increase Tribal participation and access to funding for water programs and projects to have more sustainable Tribal water resources.

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