

**California Drought Contingency Plan (Annotated Outline)**  
**October 14, 2009**

**EXECUTIVE SUMMARY**

*The executive summary will provide an overview of the plan and its recommendations.*

**INTRODUCTION**

**1.1 Purpose**

The purpose of the California Drought Contingency Plan is to articulate a coordinated State Government strategy for preparing for, responding to, and recovery from drought.

*The intent is to capture the responses of state government agencies on not just water supply or water demand but also actions to address the impacts of drought such as air quality, economic, and social.*

**1.2 Scope**

The California Drought Contingency Plan focuses on 1) State Government role and coordination for drought 2) drought monitoring and preparedness 3) assessment of and adaptation to the impacts of drought, and 4) measures to mitigate the economic, environmental and social risks and consequences of drought events.

Key elements to a successful drought plan include:

- A comprehensive drought indicators monitoring system to provide early warning of emerging drought conditions and provide data to decision makers, stakeholders, and the general public.
- Improve coordination among State Agencies to effectively address evolving impacts of water shortages on resources other sectors that are sensitive to reduced rainfall and fluctuations in water supply.
- Identify short-term response measures to reduce drought impacts as well as long-term measures to reduce the impacts of future droughts.

**1.3 Goals and Objectives**

The goals and objectives of the California Drought Contingency Plan can be briefly listed as follows:

- 1) Improve State Government coordination for drought responses
- 2) Protect Health and Public Safety
- 3) Review institutional and legal impediments in responses to Drought

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- 4) Promote Drought Planning on State and Regional Levels
- 5) Improve Effectiveness of Responses to Drought
- 6) Reduce Impacts of Drought
- 7) Mitigate Impacts of Drought
- 8) Support Drought Conservation Measures
- 9) Improve Monitoring, Forecasting, and Impact Assessment
- 10) Increase Public Awareness and Education
- 11) Improve public access to information
- 12) Determine Risk and Vulnerability to Drought in California

#### **1.4 Plan Development**

*This plan was developed as part of the California Water plan and follows on a series of plans which have been developed for past droughts. This plan differs from the previous as it will be updated every 5 years. By being a part of the California Water Plan this plan this plan will be continually updated.*

*A summary of the previously prepared drought plans and what they were aimed at achieving will be provided.*

## **2. RELATIONSHIP TO OTHER PLANS AND POLICIES**

### 2.1 State Water Code

*Describe the water code sections applicable to drought.*

### 2.2 State Hazard Mitigation Plan

*Describe the drought sections of the State Hazard Mitigation Plan. This plan will be revised by the end of 2010.*

### 2.3 California Water Plan

## **3. OVERVIEW OF DROUGHTS IN CALIFORNIA**

*An overview of drought will include the historical occurrences of drought in California, the concepts of drought, and the impacts that can be expected from drought*

### 3.1 Historical Occurrences.

*The historical occurrences of drought will show that drought can be expected to occur on a regular basis. Therefore, planning for drought is a prudent activity.*

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3.2 Understanding Drought

*Understanding drought will outline the concepts of drought in order to encourage common understanding and terminology.*

3.2.1 Drought, Scarcity and Shortage

3.2.2 Water Rights and Drought

3.2.3 Resilience

3.2.4 Capacity

3.3 Drought Impacts

*The impacts of drought section will examine the types of impacts that could be expected on various sectors. These impacts will influence the responses to be examined later in the report.*

3.3.1 Water Supply Sector

3.3.2 Agriculture and Commerce Sector

3.3.3 Environment, Public Health, and Safety Sector

**4. STATE RESPONSE ACTIONS**

*In this section of the plan we hope to detail the communication, coordination, and actions that can be taken by State Agencies in preparing for, responding to, and recovery from drought. The intent is to capture the responses of state government agencies on not just water supply or water demand but also actions to address the impacts of drought such as air quality, economic, and social.*

4.1 Drought Communication and Coordination

*This section is intended to provide a view the current communication structure between state agencies and how they may be improved such that actions taken by State Agencies in preparing for, responding to, and recovery from drought will be most effective and not duplicative.*

4.1.1 Current Drought Communication Protocol and Guidelines

*Detail the current drought communication protocol used during the current drought. Provide information on how agencies currently communicate and coordinate before, during and after a drought.*

4.1.2 Declaration of Drought Conditions

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*Provide some detail on how declarations of drought conditions are currently made.*

4.1.3 Suggested Improvements to Drought Communication Protocol and Guidelines

*The most significant change suggested will be to have a form of drought communication protocol in place to monitor conditions of drought outside of a declared emergency.*

4.2 Preparing for Drought

*This sub section will be primarily tied to the resource management strategies which are part of the California Water Plan. Actions recommended in the resource management strategies are intended to manage the water resources of the State in the most effective manner. Here we will highlight the strategies in the California Water Plan which offers the greatest potential in reducing impacts of drought.*

4.3 Responding to Drought

*This section will explore the actions taken or could be taken during while in a drought. The experiences of previous drought responses will guide the development of these actions.*

4.4 Recovery from Drought

*This sub section of will outline the actions which could be taken immediately following a drought. The focus is on immediate recovery from the impacts of drought and not long term preparation for drought. It will include actions such as post drought evaluation, replenishment of water supplies, economic, and resources recovery.*

**6. DROUGHT MONITORING AND FORECASTING**

*Monitoring and forecasting is essential to support logical and effective drought responses. Any response to drought must know when conditions warrant specific levels of response. This section will examine methods to access drought, current monitoring and data collection, drought forecasting, and potential drought indices. Setting specific indices may take substantial time and effort and should involve extensive development with local involvement.*

6.1 Assessing Drought

6.2 Current Monitoring and Data Collection

6.3 Drought Forecasting

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6.4 Drought Severity

6.5 Drought Indices

**7. DROUGHT RISK AND VULNERABILITY IN CALIFORNIA**

*Drought risk and vulnerability varies throughout the State. The desire of this section is to evaluate the risk and vulnerability by each of the ten watersheds. This information should be useful for planning needed resources to respond to future droughts.*

*This section is a placeholder. Work on this subject may involve substantial coordination and input and may occur in the next iteration of the Drought Contingency Plan.*

7.1 The Drought Risk and Vulnerability Assessment

- 7.1.1 North Coast Watershed
- 7.1.2 South Coast Watershed
- 7.1.3 Sacramento Basin
- 7.1.4 San Joaquin Basin
- 7.1.5 North Lahontan
- 7.1.6 South Lahontan
- 7.1.7 San Francisco Bay Region
- 7.1.8 Central Coast
- 7.1.9 Tulare Lake Basin
- 7.1.10 Colorado River Basin