

**1. INTRODUCTION AND BACKGROUND**

<p style="text-align: center;"><b>Key IAIR Topics</b></p> <ul style="list-style-type: none"><li>❖ Definition of the study area</li><li>❖ Identification of resource problems, needs, and opportunities</li><li>❖ Development of planning objectives and constraints</li><li>❖ Screening of measures</li><li>❖ Additional screening of surface storage measures</li><li>❖ Formulation of initial alternatives</li></ul>
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The State of California Department of Water Resources (DWR) and the Department of the Interior (DOI), Bureau of Reclamation (Reclamation), in partnership with local water interests, are investigating North-of-the-Delta Offstream Storage (NODOS) opportunities. This Initial Alternatives Information Report (IAIR) for the NODOS Investigation describes the planning process used to assess and compare the initial alternative offstream surface water storage projects in the Northern Sacramento Valley.

An IAIR is an essential part of the federal planning process. DWR has completed several technical studies that provide the information required for the analysis

performed in this IAIR. Consequently, this IAIR documents existing data, including information and reports that have been developed by DWR and others, and provides additional analyses as needed to meet the requirements of the federal planning process within the study area.

This IAIR describes the:

- ❖ Background and scope for the federal Feasibility Study (FS);
- ❖ Problems, needs, opportunities, planning objectives, criteria, and constraints;
- ❖ Scope and major features of initial alternatives considered;
- ❖ Initial set of alternatives to be considered in more detail in subsequent stages of the FS; and
- ❖ Target scope, schedule, and costs of major tasks to be accomplished to complete the FS.

This report will serve to help determine whether a federal interest exists in NODOS. It also will help serve as a basis for completing the Plan Formulation Report (PFR) and the FS and FS Report.

**1.1 PURPOSE OF INVESTIGATION**

The purpose of this investigation is to identify and screen alternatives for NODOS to improve water supply reliability, increase the survival of anadromous fish populations in the Sacramento River, and provide storage and operational benefits for other CALFED Bay-Delta programs (CALFED), including Sacramento-San Joaquin River Delta (Delta) water quality, the Environmental Water Account (EWA), and the Ecosystem Restoration Programs (ERP).

**1.2 STUDY AUTHORIZATION**

The following subsections summarize the state and federal authority over the NODOS Investigation, as well as funding sources for the program.

### 1.2.1 State

Proposition 204, “The Safe, Clean, Reliable Water Supply Act,” was approved in 1996. The proposition provided \$10 million in funding for feasibility and environmental investigations of offstream storage projects upstream from the Delta that would provide storage and flood-control benefits in an environmentally sensitive and cost-effective way (Chapter 6, Article 2, Section 78656). In 1997, DWR used a portion of Proposition 204 funds to complete a two-year reconnaissance study of NODOS.

The State Budget Act of 1998 authorized DWR to continue feasibility and environmental studies pertaining to the Sites Reservoir and alternatives. As a result, DWR expanded the 1997 reconnaissance study to a broader investigation. Subsequent funding was allocated to DWR’s General Fund, as part of the CALFED Integrated Storage Investigations (ISI) program.

In November 2002, Proposition 50, the “Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002,” was approved. It authorized \$50 million for surface water storage planning and feasibility studies under CALFED. Subsequently, Proposition 50 has been the source of state funding as part of CALFED.

### 1.2.2 Federal

DOI received the following authorizations to undertake feasibility studies for the NODOS Investigation:

- ❖ Division D, Title II, Section 215 of Public Law 108-7 Consolidated Appropriations Resolution, 2003 dated February 20, 2003. This legislation specifies the following: *The Secretary of the Interior, in carrying out CALFED-related activities, may undertake feasibility studies for Sites Reservoir, Los Vaqueros Reservoir Enlargement, and Upper San Joaquin Storage projects. These storage studies should be pursued along with ongoing environmental and other projects in a balanced manner.*
- ❖ Title II, Section 211 of Public Law 108-137 dated December 1, 2003 (Fiscal Year [FY] 2004 Appropriation). This legislation specifies the following: *The Secretary of the Interior, in carrying out CALFED-related activities, may undertake feasibility studies for Sites Reservoir. The storage study should be pursued along with ongoing environmental and other projects in a balanced manner.*
- ❖ Title I, Section 103 of Public Law 108-361 Water Supply, Reliability, and Environmental Improvement Act, dated October 25, 2004, provided the following approval and authorizations.
  - Approved the CALFED Record of Decision (ROD), dated August 28, 2000, as a general framework for addressing the CALFED Bay-Delta Program, including its components relating to water storage. In selecting activities and projects, the Secretary of the Interior and the heads of the federal agencies must consider whether the activities and projects have multiple benefits (Section 103(a)(1)).
  - Authorized the Secretary of the Interior to carry out the activities of the CALFED Bay-Delta Program set forth in the CALFED ROD, subject to cost-share and other provisions if the activity has been (1) subject to environmental review and approval, as required under applicable federal and state law; and (2) approved and certified by the relevant federal agency, following consultation and coordination with the Governor of California, to be consistent with the ROD (Section 103(b)).
  - Authorized the Secretary of the Interior to carry out planning and feasibility studies for the Sites Reservoir in Colusa County to the extent authorized under the reclamation laws, the Central Valley Project Improvement Act (CVPIA), the Fish and Wildlife Coordination Act,

the Federal Endangered Species Act of 1973, and other applicable law (Section 103(d)(1)(A)(ii)(I)).

### **1.3 STUDY AREA**

The primary study area for the NODOS Investigation encompasses the Upper Sacramento River and the Northern Sacramento Valley. Figure 1-1 shows the NODOS primary study area, which includes the watersheds flowing into the Upper Sacramento River from Colusa, Tehama, Glenn, Sutter, and Butte Counties. These watersheds cover 26,000 square miles.

Given the potential influence of the additional surface storage facility on other programs and projects within the Central Valley, an extended study area also has been identified for the NODOS Investigation. The extended study area includes the Sacramento River Watershed, the Delta, and the State Water Project (SWP) and Central Valley Project (CVP) service areas.

California's Central Valley is home to over 4 million people and a wide variety of fish and wildlife, including about 180 special-status plant and animal species. The Sacramento and San Joaquin River Basins provide drinking water for over two-thirds of Californians. Agriculture is the most significant segment of the region's robust economy. The Central Valley is a major source of reliable, high-quality crops marketed to the nation and the world.

### **1.4 PURPOSE AND SCOPE OF THE IAIR**

The primary purpose of this IAIR is to document the decision-making of DWR and Reclamation and explain the formulation of initial alternatives to address planning objectives established for the NODOS Investigation. Detailed alternative plans will be developed subsequently from the initial alternatives, during the next phases of the FS. The report includes the following topics.

- ❖ Description of existing and likely future water resources and related conditions in the study area, and related problems, needs, and opportunities being addressed in the study.
- ❖ Development of planning objectives to address identified problems, needs, and opportunities.
- ❖ Identification of the planning constraints, guiding principles, and criteria for the FS.
- ❖ Development of resources management measures to address planning objectives.
- ❖ Formulation and evaluation of initial project alternatives, including a "no-action" alternative, that comply with the CALFED ROD and do not conflict with CALFED objectives, solution principles, or policies. The plan formulation and evaluation process must comply with the *Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&Gs)* (WRC, 1983).
- ❖ Potential alternatives and the screening process used to identify a recommended set of initial alternatives to be further developed in the FS.
- ❖ Identification of potential major future actions for the FS.

This IAIR will be used as an initial component of the FS. Conclusions and recommendations regarding further evaluations are expected to evolve as the FS progresses. The federal FS Report documents decisions through an iterative planning process and may recommend a specific project to Congress for authorization. A federal FS requires the acquisition of primary data and the participation of public agencies and entities and the general public in order to develop a preferred plan from a range of

alternative courses of action that meets recognized needs, problems, and opportunities associated with the planning area of concern. The FS identifies cost and benefits, project beneficiaries, cost allocation, ability to pay, financing, impacts and tradeoffs, and environmental compliance. Normally, the FS is integrated with compliance with the National Environmental Policy Act (NEPA), Fish and Wildlife Coordination Act, Endangered Species Act, National Historical Preservation Act, and other related environmental and cultural resource laws. These activities will culminate in an integrated feasibility planning report/NEPA/California Environmental Quality Act (CEQA) document.

## **1.5 EXISTING AGREEMENTS**

The following subsections summarize existing agreements affecting the NODOS Investigation.

### **1.5.1 Clean Water Act Section 404 Memorandum of Understanding**

The ROD includes a Memorandum of Understanding (MOU) between Reclamation, United States Environmental Protection Agency (EPA), the United States Army Corps of Engineers (Corps), and DWR regarding compliance with the Clean Water Act Section 404. Although the Corps cannot issue a 404 Permit based on the programmatic evaluations, the signatories agreed that the programmatic investigations contribute to the overall 404 evaluations.

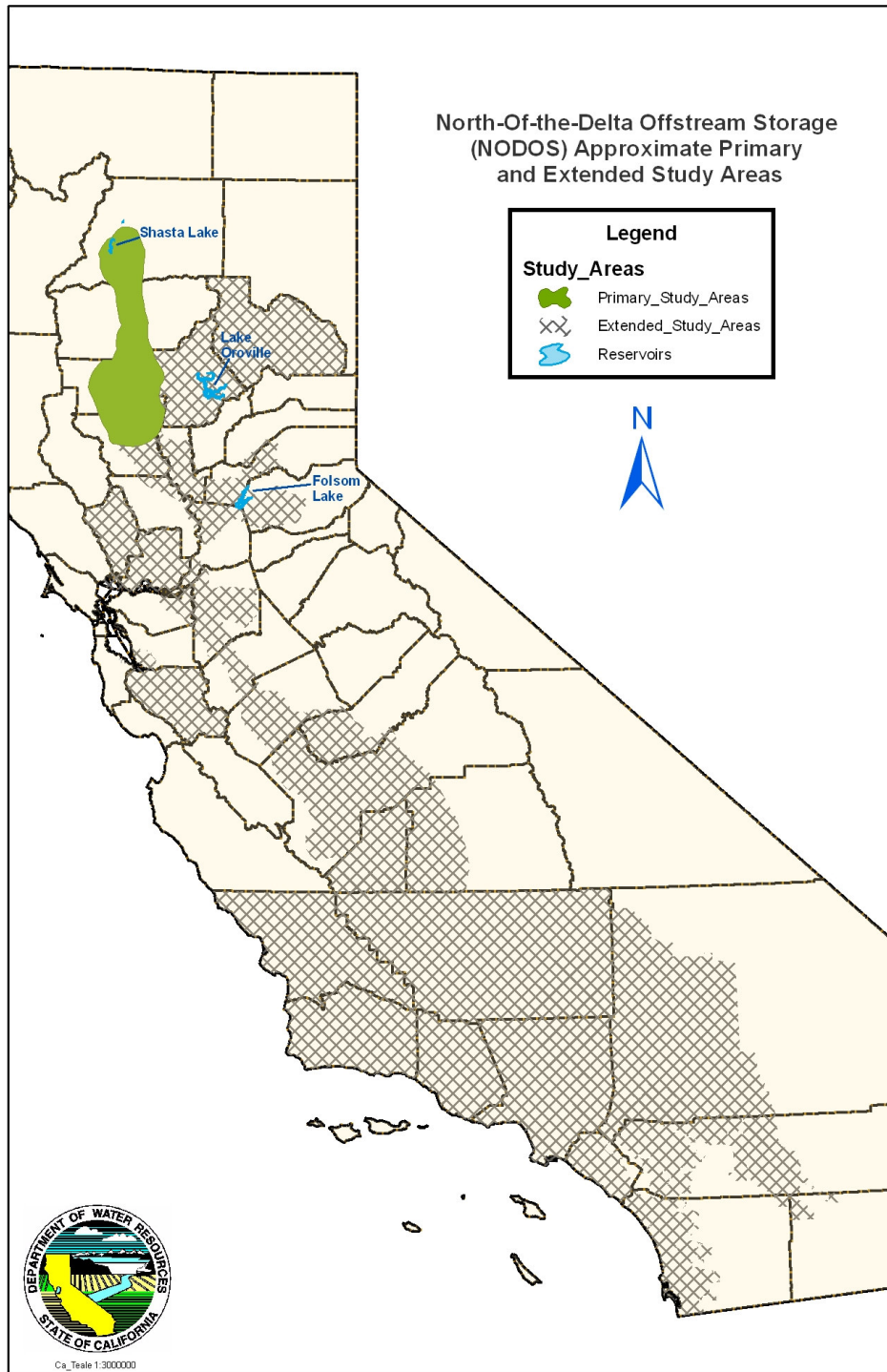
### **1.5.2 Sites Reservoir Memorandum of Understanding**

As directed by the CALFED ROD to develop a joint planning program through a MOU, DWR, Reclamation, 12 local water interests, and three other federal and state agencies signed a MOU in 2000 to cooperatively investigate north-of-the-Delta offstream storage.

## **1.6 REPORT ORGANIZATION**

The following sections comprise this IAIR:

- ❖ Section 1. Introduction and Background
- ❖ Section 2. Related Studies, Projects, and Programs
- ❖ Section 3. Without Project Conditions
- ❖ Section 4. Problems, Needs, and Opportunities
- ❖ Section 5. Plan Formulation Approach
- ❖ Section 6. Resource Management Measures
- ❖ Section 7. Initial Alternatives
- ❖ Section 8. Future Actions
- ❖ Section 9. Summary of Findings
- ❖ Section 10. Study Management and Public Involvement
- ❖ Section 11. References
- ❖ Appendix A. Local Climate and Water Resources
- ❖ Appendix B. Geology and Soils



**Figure 1-1. NODOS Study Areas**

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- ❖ Appendix C. Botanical Surveys
- ❖ Appendix D. Biological Surveys
- ❖ Appendix E. Cultural Resource Surveys
- ❖ Appendix F. Preliminary Measures Screening – CALFED and NODOS Investigations
- ❖ Appendix G. Potential Reservoir Sites

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