

# **North-of-the-Delta Offstream Storage Preliminary Administrative Draft Environmental Impact Report**

Prepared by  
**California Department of Water Resources**

December 2013



## **North-of-the-Delta Offstream Storage Preliminary Administrative Draft Environmental Impact Report**

*This preliminary administrative draft of the NODOS Environmental Impact Report (EIR) has not been reviewed or approved for adequacy in meeting CEQA and NEPA requirements. The California Department of Water Resources (DWR) is releasing this document to provide decision-makers, stakeholders, and the public with up-to-date and detailed information on the investigation.*

*Release of this material does not constitute the initiation of formal public review of the Draft EIR as provided by CEQA Guidelines Section 15087. Although comments are welcome and may be considered in preparation of the Draft EIR, DWR will not respond to comments received on this document.*

*Please note the following reading guidance for this preliminary administrative draft. Refer to the summary Table of Contents for a list of chapters and appendixes. At this time, a detailed Table of Content, List of Abbreviations and Acronyms, Index, and Chapter 37, References, are not included. Abbreviations and acronyms are defined at first use in each chapter, and references are included in a References section at the end of each chapter and appendixes when necessary. Some chapters/appendixes include figures and tables at the end of the chapters/appendixes.*

## Summary Table of Contents

### Chapters

#### Executive Summary

1. Introduction
2. Alternatives Analysis
3. Description of the Proposed Project/Proposed Action and Alternatives
4. Environmental Compliance and Permit Summary
5. Guide to the Resource Analyses
6. Surface Water Resources
7. Surface Water Quality
8. Fluvial Geomorphology and Riparian Habitat
9. Flood Control and Management
10. Groundwater Resources
11. Groundwater Quality
12. Aquatic Biological Resources
13. Botanical Resources
14. Terrestrial Biological Resources
15. Wetlands and Other Waters of the United States
16. Geology, Minerals, Soils, and Paleontology
17. Faults and Seismicity
18. Cultural Resources
19. Indian Trust Assets
20. Land Use
21. Recreation Resources
22. Socioeconomics
23. Environmental Justice
24. Air Quality
25. Climate Change and Greenhouse Gas Emissions
26. Navigation, Transportation, and Traffic
27. Noise
28. Public Health and Environmental Hazards
29. Public Services and Utilities
30. Visual Resources
31. Power Production and Energy
32. Relationship Between Short-Term Uses and Long-Term Productivity
33. Irreversible or Irretrievable Commitments
34. Growth-Inducing Impacts
35. Cumulative impacts
36. Consultation and Coordination
37. References
38. List of Preparers and Contributors
39. EIR/EIS Distribution List

## Appendixes

- Chapter 1: Introduction
  - 1A Mitigation Monitoring Plan
- Chapter 2: Alternatives Analysis
  - 2A CALFED Program Inventory of Potential Surface Water Storage Sites
  - 2B Projects and Programs Included in the No Project/No Action Alternative
  - 2C Ongoing Programs Included in the No Project/No Action Alternative
  - 2D Operations of Existing SWP and CVP Facilities and other non-SWP/non-CVP Facilities in the No Project/No Action Alternative
- Chapter 6: Surface Water Resources
  - 6A Modeling of Alternatives
  - 6B Water Resources System Modeling
  - 6C Upper Sacramento River Daily River Flow and Operations Modeling
- Chapter 7: Surface Water Quality:
  - 7A 2010 California State Water Resources Control Board 303(d) List of Water Quality Limited Segments
  - 7B Central Valley Regional Water Quality Control Board Basin Plan Criteria
  - 7C Surface Water Quality Analysis for Electrical Conductivity at Proposed Intakes
  - 7D Sacramento-San Joaquin Delta Modeling
  - 7E River Temperature Modeling
  - 7F Sites Reservoir Discharge Temperature Modeling
- Chapter 8: Fluvial Geomorphology and Riparian Habitat
  - 8A Sedimentation and River Hydraulics Modeling
  - 8B Sacramento River Ecological Flows Tool
- Chapter 11: Groundwater Quality
  - 11A Groundwater Study Results 2007
- Chapter 12: Aquatic Biological Resources:
  - 12A Fish Species Life Histories
  - 12B Fisheries Impact Assessment Methodology
  - 12C Fisheries Impact Assessment
  - 12D Water Temperature Index Value Selection Rationale
  - 12E Fisheries Impact Assessment Summary Tables
  - 12F Fisheries Flow Summary Tables
  - 12G Sacramento Splittail Usable Flooded Area Analysis
  - 12H Reservoir Water Surface Elevation Summary Tables
  - 12I Delta Pumping Salvage and Entrainment Analysis
  - 12J Early Life-Stage Salmon Mortality Modeling
  - 12K Salmonid Population Modeling
  - 12L Winter Run Chinook Salmon Life Cycle Modeling
  - 12M Delta Passage Modeling
  - 12N Weighted Useable Area Analysis
- Chapter 13: Botanical Resources
  - 13A Weed Species Potentially Present in Secondary Study Area
  - 13B Special-Status Plant Species Potentially Occurring in Secondary Study Area Aquatic Habitats

- Chapter 16: Geology, Minerals, Soils, and Paleontology:
  - 16A Soil Types within the Primary Study Area
  - 16B Colusa County Fossil Sites
  - 16C Results of the Paleontological Resources Literature Review
- Chapter 21: Recreation Resources
  - 21A Impact of NODOS Project Operations on Recreation-Day Benefit Values
  - 21B Impact of NODOS Project Operations on Usability of Reservoir Boat Ramps
- Chapter 22: Socioeconomics
  - 22A Economics Analytical Framework
  - 22B Reporting Metrics Tool
  - 22C Regional Economics Modeling
  - 22D Urban Water Supply Economics Modeling
  - 22E Urban Water Quality Economics Modeling
  - 22F Agricultural Supply Economics Modeling
- Chapter 23: Environmental Justice
  - 23A Mapbook of Minority Population
  - 23B Mapbook of Low-Income Population
- Chapter 24: Air Quality
  - 24A Methodology for Air Quality and GHG Emissions Calculations
- Chapter 25: Climate Change and Greenhouse Gas Emissions
  - 25A GHG Emissions Analysis
  - 25B Climate Change and Sea Level Rise Sensitivity Analysis
- Chapter 28: Public Health and Environmental Hazards
  - 28A California Superfund and Brownfield Sites
  - 28B Mosquitoes and Other Vectors
  - 28C Environmental Records Searches
- Chapter 31: Power Production and Energy
  - 31A Power Planning Study (PARO)
  - 31B CVP-SWP Power Modeling
- Chapter 36: Consultation and Coordination
  - 36A Scoping Report