

FINAL – Volume 4 of 4

LOS VAQUEROS RESERVOIR EXPANSION PROJECT

Environmental Impact Statement
Environmental Impact Report
State Clearinghouse No. 2006012037

Prepared for
United States Department of the Interior
Bureau of Reclamation
Mid-Pacific Region
Contra Costa Water District
Western Area Power Administration

March 2010



**FINAL ENVIRONMENTAL IMPACT STATEMENT/
ENVIRONMENTAL IMPACT REPORT
for the Los Vaqueros Reservoir Expansion Project**

This Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) has been prepared by the U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region (Reclamation) and the Contra Costa Water District (CCWD) in accordance with the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Western Area Power Administration (Western) is a cooperating agency under NEPA.

The Los Vaqueros Reservoir Expansion Project involves enlarging the existing 100 thousand acre-foot (TAF) Los Vaqueros Reservoir located in southeastern Contra Costa County, and constructing or modifying related reservoir system facilities to develop water supplies for environmental water management that supports fish protection, habitat management, and other environmental water needs in the Delta and tributary river systems, and to improve water supply reliability and water quality for urban users in the San Francisco Bay Area.

The Final EIS/EIR presents the No Project/No Action Alternative as well as four action alternatives:

- Alternative 1 – Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management and Water Supply Reliability Dual Emphasis
- Alternative 2 – Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management Emphasis
- Alternative 3 – Expanded 275-TAF Reservoir, No South Bay Connection, Environmental Water Management Emphasis
- Alternative 4 – Expanded 160-TAF Reservoir, No South Bay Connection, Water Supply Reliability Emphasis

The project alternatives would result in significant adverse environmental impacts, after mitigation, to Important Farmland (up to 22 acres; Alternatives 1 and 2) and a potential movement corridor for the San Joaquin kit fox on the west side of the existing reservoir (Alternatives 1-4). The project would result in beneficial effects on Delta fisheries and aquatic resources under Alternatives 1 and 2. Alternative 4 is Reclamation's preferred alternative.

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“The U.S. Department of the Interior protects America’s natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.”

“The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.”

“The Mission of the Contra Costa Water District is to strategically provide a reliable supply of high quality water at the lowest cost possible, in an environmentally responsible manner.”

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Acronyms and Abbreviations

ACWD	Alameda County Water District
AFT	American Farmland Trust
AIP	Alternative Intake Project
BAAQMD	Bay Area Air Quality Management District
BDCP	Bay Delta Conservation Plan
BMP	Best Management Practice
BO	Biological Opinion
CalEMA	California Emergency Management Agency
CALFED	CALFED Bay-Delta Program
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CCCDCD	Contra Costa County, Department of Conservation and Development
CCCSD	Central Contra Costa Sanitary District
CCCFB	Contra Costa County Farm Bureau
CCCFC	Contra Costa County, Flood Control and Water Conservation District
CCCPW	Contra Costa County, Public Works Department
CCWD	Contra Costa Water District
CDFG	California Department of Fish and Game, see DFG
CEMC	Chevron Environmental Management Company
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFBF	California Farm Bureau Federation
CFR	Code of Federal Regulations
cfs	cubic foot (feet) per second
CO ₂ E	Carbon dioxide equivalent
County	Contra Costa County
CRLF	California red-legged frog
CTS	California tiger salamander
CVP	Central Valley Project
CVFPB	Central Valley Flood Protection Board
CVPIA	Central Valley Project Improvement Act
DA 109	Drainage Area 109
DCC	Delta Cross Channel
DDSD	Delta Diablo Sanitation District
Delta	Sacramento-San Joaquin Delta
DFG	California Department of Fish and Game, see CDFG
DHCCP	Delta Habitat Conservation and Conveyance Program

DMV	California Department of Motor Vehicles
DO	Dissolved Oxygen
DOC	California Department of Conservation
DPBC	Delta Pedalers Bicycle Club
DSOD	California Department of Water Resources, Division of Safety of Dams
DSRSD	Dublin San Ramon Services District
DWP	Delta Wetlands Project
DWR	California Department of Water Resources
EBATC	East Bay Area Trails Council
EBBC	East Bay Bicycle Coalition
EBCNPS	East Bay California Native Plant Society
EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
ECCC	East Contra Costa County
ECCCHC	East Contra Costa County Habitat Conservancy
ECCID	East Contra Costa Irrigation District
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
EWA	Environmental Water Account
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FMMP	Farmland Mapping and Monitoring Program
FWSS	Future Water Supply Study
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
HM	Habitat Management
IAIR	Initial Alternatives Information Report
ITP	Incidental Take Permit
MAFA	Million acre-feet annually
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of understanding
MSCS	Multi Species Conservation Strategy
MTBE	Mean time between events
MTC	Metropolitan Transportation District

MWD	Metropolitan Water District of Southern California
NASNF	Native Alliance of the Sierra Nevada Foothills
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOD	Notice of Determination
NOP	Notice of Preparation
NRDC	Natural Resources Defense Council
OCAP	Operations Criteria and Plan
OMR	Old and Middle River
PCBs	Polychlorinated biphenyls
PCL	Planning and Conservation League
PG&E	Pacific Gas and Electric
Preserve	Vasco Caves Regional Preserve
Program	Capital Road Improvement and Preservation Program
PTM	Particle Tracking Model
RCRA	Richmond Community Redevelopment Agency
RD	Reclamation District
RD800	Reclamation District 800
Reclamation	U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region
RMP	Resource Management Plan
ROD	Record of Decision
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBA	South Bay Aqueduct
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
SMD	Save Mount Diablo
SOM	Soil Organic Matter
SR	State Route
SR4	State Route 4
SRA	State Recreation Area
SRCSD	Sacramento Regional County Sanitation District
SWC	State Water Contractors
SWP	State Water Project
SWRCB	California State Water Resources Control Board

TAF	thousand acre-foot (feet)
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
Western	Western Area Power Administration
WWTP	Waste Water Treatment Plant
Zone 7	Alameda County Flood Control and Water Conservation District, Zone 7 aka Zone 7 Water Agency