

TABLE OF CONTENTS

Chapter		Page
	ACRONYMS AND ABBREVIATIONS	v
	EXECUTIVE SUMMARY	ES-1
1	INTRODUCTION	1-1
1.1	The Mission of the California Department of Fish and Game	1-6
1.2	Purpose of Wildlife Areas	1-6
1.3	History and Purpose of Yolo Bypass Wildlife Area.....	1-7
1.4	Land Acquisitions and Role of the Wildlife Conservation Board.....	1-9
1.5	Purpose of the Land Management Plan.....	1-9
1.6	Planning Process.....	1-9
1.7	Environmental Analysis	1-12
1.8	Organization of this Land Management Plan	1-13
2	PROPERTY DESCRIPTION AND MANAGEMENT SETTING	2-1
2.1	Geographical Setting	2-1
2.2	Property Boundaries and Easements	2-1
2.3	Existing Infrastructure.....	2-11
2.4	Management Setting.....	2-21
3	ENVIRONMENTAL SETTING	3-1
3.1	Planning Influences and Considerations	3.1-1
3.2	Agricultural Resources and Land Uses	3.2-1
3.3	Climate, Geology, Topography, and Soils	3.3-1
3.4	Geomorphology, Hydrology, and Water Quality	3.4-1
3.5	Biological Resources	3.5-1
3.6	Cultural Resources	3.6-1
3.7	Recreation and Public Use	3.7-1
4	COMPATIBLE RESOURCE MANAGEMENT AND PUBLIC USE	4-1
4.1	Evaluation of Resource Management and Public Use.....	4-1
4.2	Wildlife Area Regulations.....	4-11
4.3	Coordination to Support Resource Management and Public Use	4-13
4.4	Support of Resource Enhancement and Public Use	4-14
5	MANAGEMENT GOALS.....	5-1
5.1	Definition of Management Terms	5-2
5.2	Goals and Tasks for Elements	5-3
6	OPERATIONS AND MAINTENANCE	6-1
6.1	Operations and Maintenance Tasks to Implement Plan	6-1
6.2	Existing Staff and Additional Personnel Needs	6-1
6.3	Estimated Operations and Maintenance Cost and Funding Sources	6-3

TABLE OF CONTENTS

Chapter	Page
7	FUTURE REVISIONS TO PLAN 7-1
7.1	Minor Revisions 7-1
7.2	Major Revisions 7-2
7.3	Five-Year Plan Status Reports..... 7-2
8	DOCUMENT PREPARERS 8-1
8.1	California Department of Fish and Game 8-1
8.2	Yolo Basin Foundation..... 8-1
8.3	Consultants 8-1
9	REFERENCES AND PERSONAL COMMUNICATIONS..... 9-1

Appendices

A	Public-Outreach Summary
B	Yolo Bypass Wildlife Area–Related Targets and Programmatic Actions from the CALFED Ecosystem Restoration Program Plan
C	Yolo Bypass Wildlife Area–Hydraulic Modeling Workplan
D	Existing Memorandums of Understanding
E	Yolo Bypass Wildlife Area, Program History and Overview
F	Yolo Bypass Wildlife Area Agricultural Plan
G	Wildlife and Fish Species List for the Yolo Bypass Wildlife Area
H	Negative Declaration and Initial Study

Exhibits

1-1	Regional Location of the Yolo Bypass Wildlife Area 1-2
1-2	Map of the Yolo Bypass Wildlife Area (Yolo Bypass)..... 1-3
1-3	Historic Map of the Yolo Basin (1903–1910)..... 1-4
1-4	Land Acquisitions to the Yolo Bypass Wildlife Area 1-11
2-1	Boundary of Yolo Bypass Wildlife Area 2-3
2-2	Easements and Rights-of-Way 2-10
2-3	Current Roads, Trails, and Parking Lots 2-18
2-4	Sacramento River Flood Control Project 2-20
3.2-1	Yolo Bypass Wildlife Area Agricultural Land Designations (DOC/USDA)..... 3.2-4
3.2-2	Yolo Bypass Wildlife Area Agricultural Land Uses (2005 Crop Year)..... 3.2-6
3.3-1	Yolo Bypass Wildlife Area Aerial Photo (1937)..... 3.3-2
3.3-2	Soils Associations in the Yolo Bypass Wildlife Area 3.3-4

TABLE OF CONTENTS

Chapter	Page
---------	------

Exhibits (continued)

3.4-1	Current Map of Yolo Bypass.....	3.4-2
3.4-2	Yolo Bypass Natural Color Bands	3.4-8
3.4-3	Periods of Inundation at Lisbon Weir	3.4-10
3.4-3a	Duration of Inundation and Maximum Stage at the Lisbon Gage.....	3.4-11
3.4-4	Lisbon Gage Inundation 1935–1999	3.4-12
3.4-5	Annual Unimpaired Runoff – Four Rivers Index 1906–1999	3.4-14
3.4-6	Bypass Inundation vs. Sacramento Valley Runoff 1935–1999	3.4-15
3.4-7	Fremont and Sacramento Weir Maximum Daily Flow and Yolo Bypass Inundation 1935–1999	3.4-16
3.4-8	Putah and Cache Creeks Maximum Daily Flow and Yolo Bypass Inundation 1935–1999	3.4-17
3.4-9	Periods of Fremont Weir Activity	3.4-18
3.4-10	Hydrographs of Inputs to Yolo and Stage at Lisbon Gage 1995–1998	3.4-20
3.4-11	Hydrographs of Inputs to Yolo and Stage at Lisbon Gage 1995–1998 Expanded scale	3.4-21
3.4-12	Hydrographs of Inputs to Yolo and Stage at Lisbon Gage 1987–1990	3.4-22
3.4-13	Cache Creek Flow and Lisbon Gage Stage 1988	3.4-23
3.4-14	Stage Increase at Lisbon vs. Cache Creek Maximum Daily Flow	3.4-24
3.4-15	Average Monthly Evapotranspiration, Precipitation, and Temperature within the Yolo Basin	3.4-25
3.4-16	Groundwater Subbasins According to DWR Bulletin 118.....	3.4-26
3.5-1	Yolo Bypass Wildlife Area Managed Permanent and Seasonal Wetlands.....	3.5-4
3.5-2	Map of CNDDDB Recorded Special-status Species Occurrences in the Yolo Bypass Wildlife Area ...	3.5-33
3.7-1	Current Public Use Map of the Yolo Bypass Wildlife Area (2006).....	3.7-3
3.7-2	Hunting Map of the Yolo Bypass Wildlife Area (2006)	3.7-4
4.1-1	Compatible Resource Management Activities and Public Uses in the Yolo Bypass Wildlife Area	4-3
4.1-2	Resource Management Yolo Bypass Wildlife Area.....	4-4
4.1-3	Public Uses of the Yolo Bypass Wildlife Area	4-5

Tables

2.2-1	Management Units in the Yolo Bypass Wildlife Area	2-5
2.3-1	Water Diversion and Delivery for the Original Yolo Bypass Wildlife Area	2-15
3.2-1	Yolo Bypass Wildlife Area – Agricultural Land Designations	3.2-3
3.2-2	Yolo Bypass Wildlife Area – Crop Forage Values for Wildlife	3.2-5
3.2-3	Yolo Bypass Wildlife Area – Crop Production Acreages 2004–2006	3.2-7
3.2-4	Yolo Basin Wildlife Area Grazing Acreages 2004–2006	3.2-7
3.2-5	Crop Production Practices	3.2-8
3.3-1	Soil Association Characteristics of the Yolo Bypass Wildlife Area	3.3-3

TABLE OF CONTENTS

Chapter	Page
Tables (continued)	
3.4-1	Land Uses and Flood Season Manning's n Values 3.4-7
3.4-2	Yolo Bypass Boundary Conditions 3.4-9
3.4-3	Clean Water Act Section 303(d) List of Impaired Waters Associated with the Yolo Bypass 3.4-29
3.4-4	Yolo Bypass Water Quality Management Plan Pollutants of Concern 3.4-32
3.5-1	Crosswalk Among Yolo Bypass Wildlife Area Community Types and Other Vegetation Classifications 3.5-2
3.5-2	Special-status Plants Known to Occur or with Potential to Occur at Yolo Bypass Wildlife Area..... 3.5-16
3.5-3	Special-status Wildlife Known or with Potential to Occur Regularly at Yolo Bypass Wildlife Area 3.5-28
3.5-4	Fish Species in the Yolo Bypass Wildlife Area 3.5-41
3.5-5	Special-status Fish Species Potentially Occurring in the Yolo Bypass Wildlife Area..... 3.5-49
3.6-1	Summary of Previous Cultural Investigations in the Vicinity of the Yolo Bypass Wildlife Area 3.6-14
3.6-2	Cultural Resources Documented in the Yolo Bypass Wildlife Area..... 3.6-17
3.7-1	Yolo Bypass Wildlife Area Hunting Seasons..... 3.7-7
3.7-2	Yolo Bypass Wildlife Area Hunting Results (1997–98 through 2005–06)..... 3.7-7
6.1-1	Operations and Maintenance Requirements to Implement Plan..... 6-5
6.3-1	Proposed Staffing Program for the Yolo Bypass Wildlife Area..... 6-37

ACRONYMS AND ABBREVIATIONS

2002 Farm Bill	Farm Security and Rural Investment Act of 2002
°F	Fahrenheit
A-P	Agricultural Preserve
Accord	May 2000 Putah Creek Water Accord
ADA	Americans with Disabilities Act
afa	acre-feet per annum
af/acre	acre-foot per acre
Basin	Yolo Basin
Basin Plan	Sacramento-San Joaquin River Basin Plan
BIT	Biennial Inspection of Terminals
BMP	best management practices
CALFED	CALFED Bay-Delta Program
CALFED Final PEIS/EIR	<i>CALFED Final Programmatic Environmental Impact Statement and Environmental Impact Report</i>
Caltrans	California Department of Transportation
CBDA	California Bay-Delta Authority
CDF	California Department of Forestry and Fire Protection
Central Valley RWQCB	Central Valley Regional Water Quality Control Board
CEQA	California Environmental Quality Act
CESA	California Endangered Species Acts
cfs	cubic feet per second
CHRIS	California Historical Resources Information System
cm	centimeters
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Comprehensive Study	Sacramento and San Joaquin River Basins California Comprehensive Study
CR	County Road
CRHR	California Register of Historical Resources
CSP	Conservation Security Program
CVHJV	California Central Valley Habitat Joint Venture
CVJV	Central Valley Joint Venture
CVP	Central Valley Project
CWA	California Waterfowl Association
CWA	Clean Water Act

Acronyms and Abbreviations *(continued)*

Delta	Sacramento–San Joaquin River Delta
DFG	California Department of Fish and Game
Dixon RCD	Dixon Resource Conservation District
DOC	California Department of Conservatio
DPC	Delta Protection Commission
Drain	Colusa Basin Drain
DU	Ducks Unlimited
DUHU	Diverse Upland Habitat Unit
DWR	California Department of Water Resources
EFH	Essential Fish Habitat
ERP	CALFED Ecosystem Restoration Program
ERPP	Ecosystem Restoration Program Plan
EPA	Environmental Protection Agency
ESA	Federal Endangered Species Acts
ESA/CESA	Federal or California Endangered Species Acts
Estuary	San Francisco Estuary
ESU	Evolutionarily Significant Unit
FMMP	Farmland Mapping and Monitoring Program
FOC	State-Federal Flood Operations Center
Forum	Sacramento River Corridor Planning Forum
Foundation	Yolo Basin Foundation
FSA	Farm Services Agency
GIS	geographic information system
GRCD	Grasslands Resource Conservation District
HCP	Habitat Conservation Plan
HCP/NCCP	Habitat Conservation Plan/Natural Communities Conservation Plan
hp	horsepower
I-5	Interstate 5
I-80	Interstate 80
ICS	Incident Command System
IRWMP	Integrated Water Management Plan
IS	Initial Study

Acronyms and Abbreviations *(continued)*

kg/yr	kilograms/year
LMP	Land Management Plan
LPCCC	Lower Putah Creek Coordinating Committee
m	meters
MCL	Maximum concentration levels
mg/L	milligrams per liter
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MSCS	Multi-Species Conservation Strategy
NASR	National Association of Shooting Ranges
NAWCA	North American Wetlands Conservation Act
NAWMP	North American Waterfowl Management Plan
NCCP	Natural Communities Conservation Plan
NIWQP	National Irrigation Water Quality Program
NMFS	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NOA	Notice of Applicability
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
NWR	National Wildlife Refuges
NWS	National Weather Service
O&M	operation and maintenance
PDD	Putah Creek Diversion Dam
PFMC	Pacific Fishery Management Council
PG&E	Pacific Gas and Electric Company
Plan	Land Use and Resource Management Plan for the Primary Zone of the Delta
POC	pollutants of concern
Putah Creek Accord	Putah Creek Settlement Agreement
RCD	Resource Conservation District
RD	Reclamation District
regional plan	Primary Zone of the Delta
RMA2	two-dimensional hydraulic model
ROD	Record of Decision

Acronyms and Abbreviations *(continued)*

RWQCB	Regional Water Quality Control Board
SAAMI	Sporting Arms and Ammunition Manufacturers' Institute
SACOG	Sacramento Area Council of Government
SAFCA	Sacramento Area Flood Control Agency
SCWA	Solano County Water Agency
SHPO	State Historic Preservation Officer
SMUD	Sacramento Metropolitan Utilities District
SNRR	Sacramento North Railroad
SPRR	Southern Pacific Railroad
SRFCP	Sacramento River Flood Control Project
SSO	site-specific objectives
State Reclamation Board	California Department of Water Resources
SVWQC	Sacramento Valley Water Quality Coalition
SWP	State Water Project
SWRCB	State Water Resources Control Board
SYMVCD	Sacramento-Yolo Mosquito and Vector Control District
TMDL	total maximum daily load
UCD	University of California, Davis
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDA NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WA	State Wildlife Areas
WCB	Wildlife Conservation Board
WDR	waste discharge requirements
WAHC	Wildlife Area Habitat Committee
WMAP	Watershed Management Action Plan
Working Group	Yolo Bypass Working Group
WRP	Wetland Reserve Program
YBIWG	Yolo Bypass Interagency Working Group
YCWMA	Yolo County Weed Management Area