DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STATEMENT

FOR THE

BAY DELTA CONSERVATION PLAN

PREPARED FOR:

California Department of Water Resources
U.S. Bureau of Reclamation
U.S. Fish and Wildlife Service
National Marine Fisheries Service

PREPARED BY:

ICF International
630 K Street, Suite 400
Sacramento, CA 95814

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Acronyms and Abbreviations

°F	degrees Fahrenheit
µg	micrograms
µg/g	micrograms per gram
µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
µmhos/cm	micromhos/cm
µmol/L	micromoles per liter
µS/cm	microSiemens per centimeter
1978 Delta Plan	State Water Board adopted the Sacramento–San Joaquin Delta Basin and San Francisco Bay Basin plans, which included water quality standards. These plans formed the basis for the WQCP for the Delta and Suisun Marsh adopted in 1978
1983 CDFG Agreement	Agreement Concerning the Operation of the Oroville Division of the State Water Project for Management of Fish and Wildlife
1993 NMFS BiOp	NMFS Sacramento River Winter-run Chinook Salmon Biological Opinion
1995 Bay-Delta Plan	San Francisco Bay/Sacramento–San Joaquin Delta Water Quality Control Plan
1O3	Lodi Airport
2009 Plan	Northern Sacramento Valley Planning Area 2009 Triennial Air Quality Attainment Plan
AAs	Administering Agencies
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
AB 1717	Suisun Marsh Preservation Act of 1977
AB 1807	Tanner Air Toxics Act
AB 2588	Air Toxics Hot Spots Information and Assessment Act of 1987
AB 32	Assembly Bill 32, the California Global Warming Solutions Act of 2006
AB 433	Marine Invasive Species Act of 2003
ABAG	Association of Bay Area Government
ACE	Altamont Commuter Express
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
Act	Delta Protection Act of 1992
ACWD	Alameda County Water District
af	acre-feet
AF/yr	acre-feet per year
AFB	Air Force Base
Ag Vision	California Agricultural Vision
AGR	Agricultural Supply
AIP	Alternative Intake Project

ALSP	Agricultural Lands Stewardship Plan
ALUC	Airport Land Use Commission
AMBAG	Association of Monterey Bay Area Governments
AMMs	avoidance and minimization measures
AMS	Agriculture Marketing Service
AOA	Air Operations Area
AP	Alquist-Priolo
AQMD	Air Quality Management District
AQMP	Air Quality Mitigation Plan
AQUA	Aquaculture
AR	atmospheric river
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
ASL	anticipated service life
AST	aboveground storage tanks
ASTM	American Society for Testing and Materials
ATS	Active Treatment Systems
AVEK	Antelope Valley – East Kern Water Agency
BA	Balancing Authorities
BAAQMD	Bay Area Air Quality Management District
BAARI	Bay Area Aquatic Resource Inventory
BANC	Balancing Authority of Northern California
Banks pumping plant	Harvey O. Banks Pumping Plant
BART	Bay Area Rapid Transit District
Basin Plan	Central Valley Regional Water Quality Control Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins
Bay	San Francisco Bay
Bay Area	San Francisco Bay Area
Bay Plan	San Francisco Bay Plan
Bay-Delta	San Francisco Bay/Sacramento–San Joaquin Delta
Bay-Delta Plan, Bay-Delta WQCP	San Francisco Bay/Sacramento–San Joaquin Delta Estuary Water Quality Control Plan
BCC	birds of conservation concern
BCDC	Bay Conservation and Development Commission
BDAT	Bay-Delta and Tributaries Project
BDCP	Bay Delta Conservation Plan
BECT	BDCP Environmental Coordination Team
BETP	built environment treatment plan
bgs	below ground surface
BIA	Bureau of Indian Affairs
BIOL	Preservation of Biological Habitats of Special Significance
BiOp	Biological Opinion
BLM	biotic ligand model

BLM	Bureau of Land Management
Blueprint Report	The Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties
BMP	best management practices
BMX	bicycle motocross
BNSF	Burlington Northern Santa Fe
BNSF Railway	Burlington Northern Santa Fe Railway
BP	before present
BPBG	baseline plus background growth
BPBGPP	Baseline Plus Background Growth Plus Project
BPS	best performance standards
C&D	Construction and Demolition
C83	Byron Airport
CA	California Aqueduct
CAA	Clean Air Act
CAAA	Clean Air Act amendments
CAAQS	California ambient air quality standards
CAISMP	California Aquatic Invasive Species Management Plan
CAISO	California Independent System Operator
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALFED	CALFED Bay-Delta Program
CALFED ROD	CALFED Bay-Delta Program, Programmatic Record of Decision
CAL FIRE	California Department of Forestry and Fire Protection
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CALVEG	U.S. Forest Service's California Vegetation
CAP	Climate Action Plan
CARB	California Air Resources Board
Carl Moyer Program	Carl Moyer Memorial Air Quality Standards Attainment Program
CASGEM	California Statewide Groundwater Elevation Monitoring
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCAs	Community Choice Aggregations
CCF	Clifton Court Forebay
CCP	Comprehensive Conservation Plan
CCR	California Code of Regulations
CCT	Central California Traction Company
CCWD	Contra Costa Water District
CDBW	California Department of Boating and Waterways

CDE	California Department of Education
CDEC	California Data Exchange Center
CDFA	California Department of Food and Agriculture
CDFG	Department of Fish and Game
CDFW	California Department of Fish and Wildlife, formerly the California Department of Fish and Game (before January 1, 2013)
CDO	Cease and Desist Order, Water Rights Order No. 2006-0006
CDPR	California Department of Pesticide Regulation
CDPs	Census-designated places
CDWA	Central Delta Water Agency
CEC	California Energy Commission
CEHC	California Essential Habitat Connectivity
Central Valley Water Board	Central Valley Regional Water Quality Control Board
CEQ	Council of Environmental Quality
CEQA	California Environmental Quality Act
CER	Conceptual Engineering Reports
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CF	conversion factor
CFL	compact florescent lamps
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGP	Construction General Permit
CGS	California Geological Survey, formerly California Department of Mines and Geology
CH	County Highway
CH_4	methane
CHRIS	California Historical Resources Information System
CHS	concrete hydraulic structures
CHSRA	California High Speed Rail Authority
CHTR	Collection Handling, transport, and release
CIDH	cast-in-drilled-hole
CIP	Capital Improvement Program
CIP-	cast-in-place-
CIR	Cortina Indian Rancheria
CIWMB	California Integrated Waste Management Board
cKOPs	candidate key observation points
Clean Air Act	Federal Clean Air Act
CLUP	Comprehensive Land Use Plan
CM	Conservation Measure
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society

CNRA	California Natural Resource Agency
CO	carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COA	Coordinated Operations Agreement
CO-CAT	Coastal and Ocean Working Group of the California Climate Action Team
COG	Council of Governments
COLD	Cold Freshwater Habitat
COMM	Commercial and Sport Fishing
CPA	conservation planning area
CPT	Cone Penetration Test
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CRSB	Coast Ranges—Sierran Block
CSD	Community Service District
CSMP	Construction Site Monitoring Program
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CUWA	California Urban Water Agencies
CVFMP	Central Valley Flood Management Program
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
CVHM-D	Central Valley Hydrologic Model-Delta
CVJV	Central Valley Joint Venture
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CWEMF	California Water and Environmental Modeling Forum
CWHR	California Wildlife Habitat Relationships
CWT	coded wire tag
CZ	Conservation Zone
D/DBP	Disinfection Byproducts
D-1485	State Water Resources Control Board water rights decision
D-1641	1995 Bay-Delta WQCP, and the adoption of State Water Resources Control Board Decision 1641
D-893	SWRCB Decision 893
DAT	Data Assessment Team
dB	decibel
dBA	A-weighted decibel
DBCP	dibromochloropropane
DBEEP	Delta-Bay Enhanced Enforcement Program

DBPs	disinfection by-products
DBW	California Department of Boating and Waterways
DCC	Delta Cross Channel
DDT	dichlorodiphenyltrichloroethane
Delta	Sacramento–San Joaquin Delta
Delta Protection Act	Johnston-Baker-Andal-Boatwright Delta Protection Act of 1992
Delta Reform Act	Sacramento–San Joaquin Delta Reform Act of 2009
DES	Diethylstibestrol
DHCCP	Delta Habitat Conservation and Conveyance Program
DMC	Delta Mendota Canal
DMD	Dredge Material Disposal
DNL	Daytime-Nighttime Noise Level
DO	dissolved oxygen
DOC	dissolved organic carbon
DOC	California Department of Conservation
DOE	U.S. Department of Energy
DOF	California Department of Finance
DOGGR	California Department of Conservation Division of Oil, Gas, and Geothermal Resources
DOI	U.S. Department of the Interior
DOT	Department of Transportation
DPC	Delta Protection Commission
DPFs	diesel particulate filters
DPH	California Department of Public Health
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DPR property	Delta Meadows River Park
DPS	distinct population segment
DRERIP	Delta Regional Ecosystem Restoration Implementation Plan
DRMS	Delta Risk Management Strategy
dS	deciSiemens
dS/m	deciSiemens per meter
DSC	Delta Stewardship Council
DSM2	Delta Simulation Model 2
DSOD	Division of Safety of Dams
DSRAM	Delta Smelt Risk Assessment Matrix
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
DWSC	Stockton Deep Water Ship Channel
DWSE	design water surface elevations
E/I	export/import
EACCS	East Alameda County Conservation Strategy
EBC	existing biological conditions

EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EC	electrical conductivity
ECAP	East County Area Plan
ECAs	Essential Connectivity Areas
ECCCHCP/NCCP	East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan
ECe	Soil Salinity
E-Clay	Corcoran Clay
ECw	Water Salinity
EDC	endocrine disrupting compounds
EDD	California Employment Development Department
EFH	essential fish habitat
EIR	environmental impact report
EIS	environmental impact statement
ELPH	Equivalent Level of Public Health Protection
ELT	Early Long Term
EM	Engineer Manual
EMF	electromagnetic field
EMT	emergency medical technicians
ENSO	El Niño Southern Oscillation
Environmental Checklist	California Environmental Quality Act Guidelines
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPB	earth pressure balance
EPCRA	Emergency Planning and Community Right-to-Know Act
ERIP	Emissions Reduction Incentive Program
ERP	Environmental Restoration Program
ERP DRERIP	Ecosystem Restoration Program Delta Regional Ecosystem Restoration Implementation Plan
ERPP	Ecosystem Restoration Program Plan
ESA	Environmental Site Assessment
ESO	evaluation starting operation
ESP	Economic Sustainability Plan
ESP	energy service provider
EST	estuarine habitat
EST	eastside tributaries
EWA	Environmental Water Account
Exchange Contractors	San Joaquin River water rights holders
Export Service Areas	State Water Project and Central Valley Water Project Export Service Areas
F72	Franklin Field
FAA	Federal Aviation Administration
FAV	floating aquatic vegetation

FCCL	Fish Conservation and Culture Laboratory
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFTT	Fish Facilities Technical Team
FHWA	Federal Highway Administration
FIFRA	federal Insecticide, Fungicide, and Rodenticide Act
FIRMs	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FMP	Farm Process
FMS	Flow Management Standard
FMWT	fall midwater trawl
FPA	Federal Power Act
FPCP	Fire Prevention and Control Plan
FPD	fire protection districts
fpm	feet per minute
FPPA	Federal Farmland Protection Policy Act
FR	Federal Register
FRA	Federal Railroad Administration
FRSH	Freshwater Replenishment
FRWA	Freeport Regional Water Authority
FRWP	Freeport Regional Water Project
ft	foot, feet
ft/sec	feet per second
FTA	Federal Transit Administration
FWCA	Fish and Wildlife Coordination Act
FY	Fiscal Year
g	acceleration due to gravity, 32.2 ft./sec^2
GAC	granular activated carbon
GAMA	Groundwater Ambient Monitoring and Assessment Program
General Permit	General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, State Water Board Order No. 2009-0009-DWQ
GHB	General Head Boundaries
GHG	greenhouse gas
GIS	geographic information system
GPS	global positioning system
GW	gigawatt
GWMP	groundwater management plan
GWP	global warming potential
GWR	groundwater recharge
GWR	gross vehicle weight rating
gypsum	calcium sulfate

HAAs	haloacetic acids
HABS	Historic American Building Surveys
HAER	Historic American Engineering Records
HALS	Historic American Landscape Surveys
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HDLEVIP	Heavy-Duty Low-Emission Vehicle Incentive Programs
HFC	hydrofluorocarbons
Hg/kg	mercury per kilogram
HI	Hazard Index
HMMP	hazardous materials management plan
HMTA	Hazardous Materials Transportation Act
HOS	High outflow scenario
HOTT	Habitat and Operations Technical Team
HOV	high occupancy vehicle
hp	horsepower
HQ	hazard quotients
HRA	Health Risk Assessment
HRPTT	Habitat Restoration Program Technical Team
HSI	habitat suitability index
HSR	Historic Structures Reports
HUs	Habitat Units
I-	Interstate-
IAV	invasive aquatic vegetation
ID	inside diameter
IEP	Interagency Ecological Program
IEPR	Integrated Energy Policy Report
IES	Illuminating Engineering Society
IIPP	Injury and Illness Prevention Program
IMPLAN	Impact Analysis for Planning
in/sec PPV	inches per second PPV
IND	Industrial Service Supply
Intertie	California Aqueduct/Delta-Mendota Canal Intertie
IOS	Interactive Object-Oriented Simulation Model
IOU	investor-owned utilities
IPCC	Intergovernmental Panel on Climate Change
IPM	integrated pest management
IPO	Interim Plan of Operation
IRI	International Roughness Index
IRWD	Irvine Ranch Water District
IRWM	integrated regional water management

ISA	Initial Site Assessment
ISB	Independent Science Board
ISD	Ironhouse Sanitary District
ITPs	incidental take permits
IWMA	Integrated Waste Management Act
IWMP	integrated waste management plan
IWOFF	Integrated Water Operations and Fisheries Forum
Jones Pumping Plant	C. W. "Bill" Jones Pumping Plant
JPA	Joint Powers Authority
JPOD	Joint Point of Diversion
ka	thousand years
KCWA	Kern County Water Agency
KEDU	University Airport
km	kilometers
KOP	key observation point
kV	kilovolt
KVCB	Nut Tree Airport
kW	kilowatt
Kw	soil erodibility factor
kWh	kilowatt hour
kwWh/af	kilowatt hours per acre-foot
LADWP	Los Angeles Department of Water and Power
LAFCO	Local Agency Formation Commission
LCFS	low carbon fuel standard
LED	Light Emitting Diode
LEDPA	Least Environmentally Damaging Practicable Alternative
LEL	lower explosive limit
LEP	linear extensibility percentage
LESA	Land Evaluation and Site Assessment
LFC	Low-flow channel
LID	low impact development
LiDAR	Light Detection and Ranging
LLT	late long-term
LMP	Land Management Plan
LNG	liquefied natural gas
LOS	level of service
LOS	Low outflow scenario
LPG	liquefied petroleum gas
LRA	Local Regulatory Authority
LRFD	load and resistance factor
LRMP	Land and Resource Management Plan

LSE	Load Serving Entity
LT	long-term
LUCP	Land Use Compatibility Plan
LURMP	Land Use and Resources Management Plan
LWRM	Limited Warm Freshwater Habitat
M	Moment Magnitude
M-	Marine Highway
M&I	municipal and industrial
MAF	million acre-feet
MBTA	Migratory Bird Treaty Act
MCE	Maximum Considered Earthquake
Mcf	1,000 cubic feet
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MCY	million cubic yards
MDE	maximum design earthquake
MEI	maximum exposed individual
Mercury Basin Plan Amendments	Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento–San Joaquin Delta Estuary
mg Hg/kg	milligrams mercury per kilogram
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter
MGD	million gallons per day
MHHW	mean higher high water
MIAD	Mormon Island Auxiliary Dam
MID	Modesto Irrigation District
MIGR	Migration of Aquatic Organisms
Mirant	Mirant Delta LLC
M_L	Richter Magnitude
MLD	most likely descendant
MLLW	mean lower low water
mm	millimeter
MMI	Modified Mercalli Intensity
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MPN/100 ml	most probable number per 100 milliliters
MPO	Metropolitan planning organization
MRZ	Mineral Resource Zone
MS	Municipal Separate
mS/cm	milliSiemens/cm
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Fishery Conservation and Management Act

MSCS	Multi-Species Conservation Strategy
MSDS	manufacturer of material safety data sheets
MSHA	Mine Safety and Health Administration
msl	mean sea level
MSP	Memorial State Park
MSW	municipal solid waste
MTC	Metropolitan Transportation Commission
MUN	Municipal and Domestic Supply
MVA	megavolt ampere
MW	megawatt
MWDSC	Metropolitan Water District of Southern California
MWh	megawatt hours
MWQI	Municipal Water Quality Investigations
N	nitrogen
N_2O	nitrous oxide
NAA	No Action Alternative
NAAQS	national ambient air quality standards
NAC	noise abatement criteria
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAIP	National Agriculture Imagery Program
NALs	Numeric Action Levels
NAS	National Academy of Sciences
NAV	Navigation
NAVD 88	North American Vertical Datum of 1988
NAWMP	North American Waterfowl Management Plan
NAWS	National Agriculture Worker Survey
NBA	North Bay Aqueduct
NCCP	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NDEA	N-Nitrosodiethylamine
NDMA	N-Nitrosodimethylamine
NDPA	N-Nitrosodi-n-propylamine
NDWA	North Delta Water Agency
NELs	Numeric Effluent Limitations
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
ng/g	nanograms per gram
ng/L	nanograms per liter
NGA	Next Generation Attenuation
NGVD29	National Geodetic Vertical Datum of 1929

NH_3	un-ionized ammonia
NH_4^+	ammonium ion
NHPA	National Historic Preservation Act
NHS	National Highway System
nm	nanometers
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO_2	nitrogen dioxide
NO_3-	nitrate-N
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOD	North of Delta
NOD	Notice of Decision
NOI	Notice of Intent
NOP	Notice of Preparation
North Bay	North San Francisco Bay
NO_X	nitrogen oxides
NPBs	nonphysical barriers
NPDES	National Pollutant Discharge Elimination System
NPDES Municipal Permit	Sacramento Areawide National Pollutant Discharge Elimination System Municipal Stormwater Permit
NPPA	Native Plant Protection Act of 1977
NPS	nonpoint source
NRA	National Recreation Area
NRC	National Research Council
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSJCGBA	Northeastern San Joaquin County Groundwater Banking Authority
NT	near-term
NTR	National Toxics Rule
NTU	nephelometric turbidity units
NWR	National Wildlife Refuge
O88	Rio Vista Municipal Airport
OAL	Office of Administrative Law
OBAN	Oncorhynchus Bayesian Analysis
OBE	operating basis earthquake
OCAP	Operations Criteria and Plan
OCI	Overall Condition Index
OE/AAA	Obstruction Evaluation/Airport Airspace Analysis
OEHHA	Office of Environmental Health Hazard Assessment
OFF	Operations and Fishery Forum
OHV	off-highway vehicle
OMR	Old and Middle River

OMR flow	upstream flows on the Old and Middle Rivers
ONC	Office of Noise Control
operations	Detailed criteria that will govern the operations of the SWP and CVP conveyance system across a range of hydrological conditions
OPLMA	Omnibus Public Land Management Act of 2009 (H.R. 146)
OPR	Office of Planning and Research
OPR Advisory	A technical advisory entitled CEQA and Climate Change: Addressing Climate Change through CEQA
OPSO	Office of Pipeline Safety Operations
ortho-P	ortho-phosphorus
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
P	phosphorus
PA	programmatic agreement
PAHs	polycyclic aromatic hydrocarbons
PAL	Provisionally Accredited Levee
Pb	lead
PBDEs	polybrominated diphenyl ethers
PCB	polychlorinated biphenyls
PCC	Portland cement concrete
PCE	perchloroethylene
PCI	Pavement Condition Index
PCS	Pavement Condition Survey
PCTL	Precast concrete tunnel lining
PCWA	Placer County Water Agency
PERP	Portable Equipment Registration Program
PFC	perfluorinated carbons
PG&E	Pacific Gas and Electric Company
pg/L	picograms per liter
PGA	peak ground acceleration
phosphate	soluble reactive phosphorous
Plan	Bay Delta Conservation Plan
Plan Area	BDCP Plan Area
PM	particulate matter
PM10	PM 10 microns in diameter or less
PM2.5	PM 2.5 microns in diameter or less
POC	particulate organic carbon
POD	pelagic organism decline
Porter-Cologne Act	Porter-Cologne Water Pollution Control Act
POTWs	publicly owned treatment works
POW	Hydropower Generation
ppb	parts per billion
PPCP	pharmaceutical and personal care products

PPIC	Public Policy Institute of California
ppm	parts per million
ppt	parts per trillion
ppt	parts per thousand
PPV	peak particle velocity
PQI	Pavement Quality Index
PRC	Public Resources Code
PRDs	Permit Registration Documents
Predator Control	localized reduction of predatory fishes
Primary Zone Study	Sacramento San Joaquin Delta Primary Zone Study
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PRO	Industrial Process Supply
Protection Plan	Suisun Marsh Protection Plan
Protocol	Caltrans Traffic Noise Analysis Protocol
PRS	paleontological resources specialist
PSHA	probabilistic seismic hazard analysis
PSR	project study report
PTM	particle tracking model
Public Law 108-361	Water Supply, Reliability, and Environmental Improvement Act of 2004
Public Law 84-99	Emergency Flood Control Fund Act
QA/QC	quality assurance/quality control
Qo	older alluvium
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Qy	younger alluvium
RA	Resource Adequacy
RARE	Rare, Threatened, or Endangered Species
RBDD	Red Bluff Diversion Dam
RCRA	Resource Conservation and Recovery Act
REC-1	Water Contact Recreation
REC-2	Non-Contact Water Recreation
Reclamation	Bureau of Reclamation
Reclamation Board	California Reclamation Board
Reform Act	Sacramento–San Joaquin Delta Reform Act
Regional Water Board	Regional Water Quality Control Board
REL	reference exposure level
Reporting Rule	Greenhouse Gas Reporting Rule
REPP	Renewable Energy Procurement Plan
Resource Management Plan	Land Use and Resource Management Plan
RHA	Rivers and Harbors Act of 1899
Rio Vista ALUCP	Rio Vista Airport Land Use Compatibility Plan
RM	River Mile

RMP	Resource Management Plan
RMP	Risk Management Plan
RMP	Regional Monitoring Program
RMPP	Risk Management and Prevention Program
RMS	root mean square
ROA	Restoration Opportunity Area
ROD	Record of Decision
ROD 2000	CALFED Bay Delta Program Record of Decision
ROG	Reactive organic gases
ROW	right-of way
RPA	reasonable and prudent alternative
RPS	Renewable Portfolio Standard
RSPA	Research and Special Programs Administration
RTM	reusable tunnel material
RUSLE	Revised Universal Soil Loss Equation
RV	recreational vehicle
RWCF	Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
S_a	second spectral acceleration
SAC	Sacramento Executive Airport
SAC	Sacramento River
SACOG	Sacramento Area Council of Governments
Sacramento International CLUP	Sacramento International Airport Comprehensive Land Use Plan
SAFCA	Sacramento Area Flood Control Agency
SAL	Inland Saline Water Habitat
San Francisco Bay Water Board	San Francisco Bay Regional Water Quality Control Board
San Joaquin ALUCP	San Joaquin County Airport Land Use Compatibility Plan
SANDAG	San Diego Area Governments
SAP	sampling and analysis plan
SARA	Superfund Amendments and Reauthorization Act
SAV	submerged aquatic vegetation
SB	Senate Bill
SB 1981	Nejedly-Bagley-Z'berg Suisun Marsh Preservation Act of 1974
SBA	South Bay Aqueduct
SBX7-6	California Statewide Groundwater Elevation Monitoring Program
SCAG	Southern California Association of Governments
SCC	State Coastal Conservancy
SCK	Stockton Municipal Airport
SCM	supplementary cementitious materials
SCT	South County Transit
SCVWD	Santa Clara Valley Water District

SCWA	Solano County Water Agency
SD	Structure Design
SDC	Seismic Design Criteria
SDIP	South Delta Improvements Program
SDWA	Safe Drinking Water Act
SDWA	South Delta Water Agency
SDWSC	Stockton Deep Water Ship Channel
SECAT	Sacramento Emergency Clean Air Transportation
SEL	sound exposure level
Semitropic WSD	Semitropic Water Storage District
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFBCDC	San Francisco Bay Conservation and Development Commission
SFD	Stockton Fire Department
SFEI	San Francisco Estuary Institute
SFHA	Special Flood Hazard Areas
SFNA	Sacramento Federal Nonattaiment Area
SHELL	Shellfish Harvesting
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification
SIL	Significant Impact Level
SIP	Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California
SIP	state implementation plan
SJCMSHCP	San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan
SJCOG	San Joaquin Council of Governments
SJR	San Joaquin River
SJRA	San Joaquin River Agreement
SJRRP	San Joaquin River Restoration Program
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKT	Spring Kodiak Trawl
SL	standard length
SLC	State Lands Commission
SLDMWA	San Luis & Delta Mendota Water Authority
SLR	sea level rise
SM	Suisan Marsh Habitat Management, Preservation, and Restoration Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SMARTS	Stormwater Multiple Application and Report Tracking System
SMF	Sacramento International Airport
SMGB	State Mining and Geology Board
SMMP	Selenium Monitoring and Management Plan

SMP	Suisun Marsh Plan
SMPA	Suisun Marsh Preservation Agreement
SMSCG	Suisun Marsh Salinity Control Gates
SMUD	Sacramento Municipal Utility District
SO_2	sulfur dioxide
SOD	South of Delta
Solano County MSHCP	Solano County Multispecies Habitat Conservation Plan
Solis	California Senate Bill 115
South Bay	South San Francisco Bay
SPCCP	Spill Prevention, Containment, and Countermeasure Plan
Special Projects	Delta Levees Special Flood Control Projects
SPFC	State Plan of Flood Control
SPT	Standard Penetration Test
SPT blow-counts	Standard Penetration Test sampler penetration blow-counts
SPWN	Spawning, Reproduction, and/or Early Development
SR	State Route
SRA	shaded riverine aquatic
SRCD	Suisun Resource Conservation District
SRDWSC	Sacramento River Deep Water Ship Channel
SRP	soluble reactive phosphorous
SRWQM	Sacramento River Water Quality Model
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSHCP	South Sacramento Habitat Conservation Plan
SSJCPL	Stockton-San Joaquin County Public Library
SSQP	Sacramento Stormwater Quality Partnership
SSURGO	Soil Survey Geographic
State CEQA Guidelines	State California Environmental Quality Act guidelines
State Plan of Flood Control	2012 Central Valley Flood Protection Plan
State Water Board	State Water Resources Control Board
Steering Committee	BDCP Steering Committee
Strategic Plan	Delta Vision Strategic Plan
SUU	U.S. Air Force owns and operates this private use airfield
SUVA	specific ultraviolet absorbance at a wavelength of 254 nm
SVAB	Sacramento Valley Air Basin
SVP	Society of Vertebrate Paleontology
SWANCC ruling	Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (121 S.Ct. 675,2001)
SWG	Smelt Working Group
SWIS	Solid Waste Information System
SWMPs	Storm Water Management Plans
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TACs	toxic air contaminants
TAF	thousand acre feet
Task Force	Delta Vision Blue Ribbon Task Force
TBM	tunnel boring machine
TBP	Temporary Barriers Project
TCD	temperature control device
TCDD	tetrachlorodibenzo-p-dioxin
TCE	trichloroethylene
TCM	traffic control measure
TCP	traditional cultural property
TCY	City of Tracy general aviation airport
TDR	transfer of development rights
TDS	total dissolved solids
TFCA	Transportation Fund for Clean Air
TFCF	Tracy Fish Collection Facility
the Marsh	Suisun Marsh
The Marshall Plan	State of California initiated several projects that coordinated water supply, flood control, and navigation benefits was proposed in 1920 by Colonel Marshall of the U.S. Geological Survey
THMs	trihalomethanes
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TMP	traffic management plan
TN	total nitrogen
TNM	Traffic Noise Model Lookup program
TOC	total organic carbon
TP	total phosphorus
tpd	tons per day
Tracy Fish Facility	Tracy Fish Collection Facility
Trail	Great California Delta Trail System
Trail Blueprint	Delta Protection Commission adopted the Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties
Travis LUCP	Travis Air Force Base Land Use Compatibility Plan
TSCA	Toxic Substances Control Act of 1976
TSS	total suspended solids
U.S.	United States
UBC	Uniform Building Code
UC	University of California
UC Davis	Davis, Woodland, and University of California, Davis
UCMP	University of California Museum of Paleontology
UMPS II	Uniform Minimum Protocols and Standards for Watercraft Interception Programs for Dreissenid Mussels in the Western United States
UPRR	Union Pacific Railroad

US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USB	Urban Services Boundary
USC	United States Code
USDA	U.S. Department of Agriculture
USDA Forest Service	U.S. Department of Agriculture Forest Service
USFWS	U.S. Fish and Wildlife Service
USFWS BiOp	2008 Long-Term Operation Biological Opinion
USGS	U.S. Geological Survey
UST	underground storage tanks
UV	ultraviolet
UWMP	Urban Water Management Plan
VAMP	Vernalis Adaptive Management Plan
VdB	vibration decibels
VERA	Voluntary Emission Reduction Agreement
VFD	Variable frequency drive
VOC	volatile organic compounds
VRM	Visual Resource Management
WARM	Warm Freshwater Habitat
Water Contracts	Long-term Water Contracts
WBS	Water Budget Subarea
WDL	Water Data Library
WDR	waste discharge requirement
WEG	wind erodibility group
WER	water-effect ratio
Western	Western Area Power Administration
WGCEP	Working Group on California Earthquake Probabilities
WGNCEP	Working Group on Northern California Earthquake Potential
WILD	Wildlife Habitat
Williamson Act	California Land Conservation Act
WMO	World Meteorological Organization
WQCP	Water Quality Control Plan
WRD	Water Replenishment District of Southern California
WRDA	Water Resources Development Act of 2007
WREM	Water Resources Engineering Memorandum
WTP	Water Treatment Plant
WUA	Weighted Usable Area
YBFEP	Yolo Bypass Fishery Enhancement Plan
YNHP	Yolo Natural Heritage Program
YOY	young of year
YSAQMD	Yolo Solano Air Quality Management District