

Acronyms and Abbreviations

°C	degrees Celsius
°F	degree(s) Fahrenheit
µg/g	microgram(s) per gram
µmhos/cm	micromhos per centimeter
2016 Basin Plan	<i>Sacramento and San Joaquin Rivers Basin Study</i>
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ACM	asbestos-containing material
ACEEE	American Council for an Energy-Efficient Economy
ADA	Americans with Disabilities Act
AEWSD	Arvin Edison Water Storage District
af/yr	acre feet per year
APCD	Air Pollution Control District
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ARP	Archaeological Research Program
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
Authority	Sites Project Authority
B.P.	before present
BAAQMD	Bay Area Air Quality Management District
BACT	best available control measure
BANC	Balancing Authority of Northern California
BAWQM	Bay Area Water Quality Economics Model
BBL	BBL Environmental Information
BCDC	Bay Conservation and Development Commission
BDCP	Bay Delta Conservation Plan
BEA	U.S. Bureau of Economic Analysis
BES	Bulk Electric System
bgs	below ground surface
BLM	Bureau of Land Management
BMP	best management practices
BSA	Broader Sacramento Area
C&LRR	Colusa & Lake Railroad
CAA	Clean Air Act

CAAQS	California Ambient Air Quality Standard
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Prevention Protection
CalEPA	California Environmental Protection Agency
CALFED	CALFED Bay-Delta Program
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CASGEM	California Statewide Groundwater Elevation Monitoring
CBD	Colusa Basin Drain
CCAA	California Clean Air Act
CCAPCD	Colusa County Air Pollution Control District
CCP	Comprehensive Conservation Plan
CCR	California Code of Regulations
CCSB	Cache Creek Settling Basin
CCWD	Contra Costa Water District
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIIA	Critical Infrastructure Information Act
CIWMB	California Integrated Waste Management Board
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide

CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COA	Coordinated Operations Agreement
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CRSB	Coast Ranges-Sierran Block
CSIA	California State Irrigation Association
CSLC	California State Lands Commission
CVC	Cross Valley Canal
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
CVHM	Central Valley Hydrologic Model
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVRWQCB	Central Valley Regional Water Quality Control Board
CV-SALTS	Central Valley Salinity Alternatives for Long-term Sustainability
CWA	Clean Water Act
cy	cubic yards
dB	decibels
dBA	decibels, A-weighted
DBCP	dibromochloropropane
DBP Rule	Disinfection Byproduct Rule
DBW	Department of Boating and Waterways
DCR 2015	DWR's 2015 Delivery Capability Report CALSIM II model
DEIR/EIS	Draft Environmental Impact Report/Environmental Impact Statement
Delta	Sacramento-San Joaquin Delta
DNL	daytime-nighttime noise level
DOC	California Department of Conservation
DOF	California Department of Finance
DOI	U.S. Department of the Interior
DPR	Department of Parks and Recreation
DPS	Distinct Population Segment
DPW	Department of Public Works
DSHA	deterministic seismic hazard analysis
DSOD	California Division of Safety of Dams
DTSC	California Department of Toxic Substances Control

DWR	California Department of Water Resources
EA	environmental assessment
EBMUD	East Bay Municipal Utility District
EC	electrical conductivity
EDD	California Employment Development Department
EDWPA	El Dorado Water and Power Authority
EFH	essential fish habitat
EID	El Dorado Irrigation District
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
EMF	electric and magnetic field
EO	Executive Order
EOM	end of month
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	federal Endangered Species Act
FEW	Fresh Emergent Wetland
FHWA	Federal Highway Administration
FHWG	Fisheries Hydroacoustic Working Group
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act of 1981
fps	feet per second
FR	<i>Federal Register</i>
FRSA	Feather River Service Area
FTA	Federal Transit Administration
FTE	full-time equivalent
FWCA	Fish and Wildlife Coordination Act
FY	fiscal year
GAMA	Groundwater Ambient Monitoring and Assessment
GCAPCD	Glenn County Air Pollution Control District
GCID	Glenn-Colusa Irrigation District
GCM	Global Climate Model

GHG	greenhouse gas
GIS	geographic information system
gpm	gallon(s) per minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GVS	Great Valley Sequence
GWh	gigawatt-hours
GWMP	groundwater management plan
GWP	global warming potential
HAP	Hazardous Air Pollutants
HC	hydrocarbon
HCP	Habitat Conservation Plan
HCS	Hantavirus Cardiopulmonary Syndrome Disease
HFC	high flow channel
HFC	hydrofluorocarbon
hp	horsepower
I:E	inflow:export
I-5	Interstate 5
IOU	investor-owned utility
IPaC	Information for Planning and Conservation
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITA	Indian Trust Asset
IWM	instream woody material
JPA	Joint Powers Authority
kg	kilogram
km	kilometer
kV	kilovolt
kVA	kilovolt-amperes
L ₁₀	the noise level exceeded for 10 percent of the measurement period
L ₉₀	the noise level that is exceeded during 90 percent of the measurement period
lb	pound
LCPSIM	Least Cost Planning Simulation Model
LCRBWQM	Lower Colorado River Basin Water Quality Model
L _{dn}	day-night average level daytime-nighttime noise level
LEDPA	Least Environmentally Damaging Practicable Alternative
LFC	Low Flow Channel

LLT	Late Long Term
L _{max}	the maximum sound pressure level over a defined period
LOS	level of service
LOS	level of significance
LRFD	Load and Resistance Factor Design
LRMP	Land and Resource Management Plan
m	meter(s)
M&I	municipal and industrial
MACT	Maximum Achievable Control Technology
MAF	million acre-feet
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant levels
MCV	Manual of California Vegetation
MERP	Mercury Exposure Reduction Program
mg/L	milligram(s) per liter
MID	Maxwell Irrigation District
MIDPD	Merced Irrigation District Parks Department
MIDS	Morrow Island Distribution System
milliohm/cm	one thousandth of an ohm per centimeter
M _L	local magnitude
MLD	Most Likely Descendent
mm/yr	millimeters per year
mmhos/cm	millimhos per centimeter
MMT	million metric tons
MNWS	Maximum Normal Water Surface
MOU	Memorandum of Understanding
mt/yr	metric ton(s) per year
MTBE	methyl tertiary butyl ether
MW	megawatt
M _w	moment magnitude
MWh	megawatt-hours
MYA	million years ago
N/A	not available; not reported
N ₂ O	nitrous oxide
NA	not available
NAAQS	National Ambient Air Quality Standard
NAGPRA	Native American Graves Protection and Repatriation Act

NAHC	Native American Heritage Commission
NAIP	National Agricultural Imagery Program
NAS	National Academy of Sciences
NAVD88	North American Vertical Datum of 1988
NAWMP	North American Waterfowl Management Plan
NCCP	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NCRWQCB	North Coast RWQCB
NDMA	n-nitrosodimethylamine
NEIC	Northeast Information Center
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NESHAP	National Emission Standards for Hazardous Air Pollutant
NFIP	National Flood Insurance Program
ng/L	nanogram(s) per liter
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA/ESRL	National Oceanic and Atmospheric Administration Earth System Research Laboratory
NOC	Notice of Completion
NOD	Notice of Determination
NODOS	North-of-the-Delta Offstream Storage
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act of 1977
NPS	National Park Service
NRA	National Recreation Area
NRC	National Research Council
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	new source performance standards
NSR	New Source Review

NSVPA	Northern Sacramento Valley Planning Area
NTR	National Toxics Rule
NWI	National Wetland Inventory
NWIC	Northwestern Information Center
NWR	National Wildlife Refuge
O ₃	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OMWEM	Other Municipal Water Economics Model
OPLMA	Omnibus Public Land Management Act
OPR	Office of Planning and Research
P&Gs	Principle and Guidelines
PA	programmatic agreement
PATON	Private Aid to Navigation
Pb	lead
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PEIS	programmatic environmental impact statement
PFC	perfluorocarbon
PFMC	Pacific Fishery Management Council
PG&E	Pacific Gas and Electric Company
PGA	peak horizontal ground acceleration
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
PMF	probable maximum flood
ppb	part(s) per billion
ppm	part(s) per million
ppmv	part(s) per million by volume
ppt	part(s) per thousand
PR&G	Principle, Requirement, and Guideline
PRC	Public Resources Code
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
Project	Sites Reservoir/North-of-the-Delta Offstream Storage Project
Proposition 1	Water Quality, Supply, and Infrastructure Improvement Act of 2014
PSD	Prevention of Significant Deterioration
psu	practical salinity unit
PTE	potential to emit
PURPA	Public Utility Regulatory Policies Act

RBDD	Red Bluff Diversion Dam
RBPP	Red Bluff Pumping Plant
RCC	roller compacted concrete
RCRA	Resource Conservation and Recovery Act
RD	Reclamation District
RDEIR/SDEIS	Recirculated Draft EIR/Supplemental Draft EIS
Reclamation	Bureau of Reclamation
RM	River Mile
ROD	Record of Decision
ROG	reactive organic gases
RPA	Reasonable and Prudent Alternative
RPS	renewable portfolio standard
RRDS	Roaring River Distribution System
RTS	reservoir triggered seismicity
RV	recreation vehicle
RVD	recreation visitor day
RWQCB	Regional Water Quality Control Board
SA	spectral acceleration
SacEFT	Sacramento Ecological Flow Model
SACFEM	Sacramento Valley Finite-Element Groundwater Model
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SARA	Superfund Amendments and Reauthorization Act of 1986
SB	Senate Bill
SCADA	supervisory control and data acquisition
SCVWD	Santa Clara Valley Water District
SDWA	Safe Drinking Water Act
SDWTEA	Safe Drinking Water and Toxics Enforcement Act
Secretary	Secretary of the Department of the Interior
SEW	Saline Emergent Wetland
SF ₆	sulfur hexafluoride
SFB RWQCB	San Francisco Bay Regional Water Quality Control Board
SFHA	Special Flood Hazard Area
SFTR	South Fork Trinity River
SGMA	Sustainable Groundwater Management Act
SGPWA	San Geronio Pass Water Agency
SIP	State Implementation Plan
SJRA	San Joaquin River Agreement

SMARA	Surface Mining and Reclamation Act
SMPA	Suisun Marsh Protection Act
SMSCG	Suisun Marsh Salinity Control Gate
SNMP	Salt and Nitrate Management Plan
SO ₂	sulfur dioxide
SOI	sphere of influence
SO _x	oxides of sulfur
SPCC	Spill Prevention, Control, and Countermeasures
SPCCP	spill prevention control and countermeasure plan
SPFC	State Plan of Flood Control
SR	State Route
SRA	State Recreation Area
SRBPP	Sacramento River Bank Protection Project
SRCD	Suisun Resource Conservation District
SRFCP	Sacramento River Flood Control Project
SRWA	Sacramento River Wildlife Area
STAA	Surface Transportation Assistance Act
State	State of California
State Parks	California Department of Parks and Recreation
SVAB	Sacramento Valley Air Basin
SVP	Society of Vertebrate Paleontology
SWAP	Statewide Agricultural Production
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAF	thousand acre-feet
TAG	Technical Advisory Group
TANC	Transmission Agency of Northern California
TCAPCD	Tehama County Air Pollution Control District
TCCA	Tehama-Colusa Canal Authority
TCD	temperature control device
TCE	trichloroethylene
TCP	traditional cultural properties
TCR	tribal cultural resources; The Climate Registry
TDS	total dissolved solids
TEPA	Tribal Environmental Protection Agency

TID	Turlock Irrigation District
TMDL	total maximum daily load
TNC	The Nature Conservancy
tpy	tons per year
TRD	Trinity River Diversion
TRFE	Trinity River Flow Evaluation
TRR	terminal regulating reservoir
TRRP	Trinity River Restoration Program
U.S.C.	U.S. Code
UCCE	University of California Cooperative Extension
UCMP	University of California Museum of Paleontology at Berkeley
ULEP	Umpqua Land Exchange Project
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USE	Utility Systems Efficiencies, Inc.
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USRDOM	Upper Sacramento River Daily Operations Model
USRWQM	Upper Sacramento River Water Quality Model
UST	underground storage tank
UWMP	Urban Water Management Plan
VdB	vibration decibel notation
VOC	volatile organic compound
VRI	Valley foothill riparian
WA	Wildlife Area
WAPA	Western Area Power Administration
WEAP	Water Evaluation and Planning Model
WECC	Western Electricity Coordinating Council
WGCEP	Working Group for California Earthquake Possibilities
WHR	Wildlife Habitat Relationships
WQCP	water quality control plan
WRC	Water Resources Council
WRP	Wetlands Reserve Program
WSEL	water surface elevation

WSIP	Water Storage Investment Program
WUA	Weighted-Usable-Area
WWR	Wetlands and Water Resources
YCFCWCD	Yolo County Flood Control and Water Conservation District
YCWA	Yuba County Water Agency
YNHP	Yolo Natural Heritage Program
YOY	young of year