

GLOSSARY AND ABBREVIATIONS

GLOSSARY

Acre-Foot	Volume of water (43,560 cubic feet, or 325,900 gallons) that would cover one acre to a depth of one foot.
Alluvial Fan	An area of gravelly stream/river deposits spread out in fanlike deposits over a large area during a long period of time. These areas are generally found in the southern and eastern portions of the Central Valley and emanate from valley canyons.
Article 18	An article of the SWP long-term water supply contracts between the Department and each individual contractor; which addressed water supply shortages. The subdivisions of the original article addressed short-term water shortages and related water delivery priorities, permanent shortages and related reductions in Table A amounts, permanent shortages related to areas-of-origin water rights settlement contracts, reinstatements of Table A amounts, advance notice of delivery reductions, and no liability for shortages.
Article 21 Water	An article of the SWP long-term water supply contracts between the Department and each individual contractor; which addressed non-Table A water that becomes available on an intermittent, interruptible basis. The subdivisions of the original article defined SWP water types; set priorities and procedures to reduce deliveries of Article 21 water; and provided provisions for schedules, rates, power, costs, and other considerations.
Approved Table A	A prorated amount of water that the SWP can deliver to a contractor in a particular year, and can be equal to 100% of a contractor's Table A or some other reduced percentage.
Burns-Porter Act	Authorized the submission for voter approval of a \$1.75 billion general obligation bond issue to finance construction of the SWP (Water Code, §12930, et seq.).
CALFED Bay-Delta Program	A federal and State multi-agency program whose goals are to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta System.
California Aqueduct	The primary conveyance facility of the State Water Project. The 444-mile California Aqueduct conveys water from the Delta, through the San Joaquin Valley along the eastern slope of the Coastal Range, to Southern California.
California Endangered Species Act (CESA)	The California Endangered Species Act of 1985 (CESA; Fish and Game Code Section 2050 et seq.) is implemented by the California Department of Fish and Game (CDFG). CESA prohibits the "take" of listed threatened or endangered species. Take under CESA is restricted to the direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.
CALSIM II	A computer model that simulates operations of the SWP and CVP Water Systems. CALSIMII is a planning tool that was jointly developed by the Department and the U.S. Bureau of Reclamation. The model's inputs include hydrological data for specified study planning years, water demands, infrastructure and regulatory change, and other factors; outputs include deliveries to the project's contractors, river flows, reservoir changes, Delta hydrological parameters, and other data.
Carryover Water	Table A water that is allocated to a contractor in a given year, but is unused by it that year, which is stored for that contractor in SWP supply reservoirs (when storage space is available) for use by that contractor in a following year.
Central Valley Project (CVP)	The CVP is a water storage and delivery system of reservoirs, aqueducts, and pumping plants operated by the U.S. Department of Interior's Bureau of Reclamation. The CVP's main purpose is to store water and distribute it to urban and agricultural contractors in northern California, the San Joaquin Valley, and portions of the San Francisco Bay area (primarily Santa Clara and Santa Cruz counties). CVP facilities include reservoirs on the Trinity, Sacramento, American, Stanislaus, and the San Joaquin rivers. In addition, the CVP owns approximately one-half of the storage capacity of San Luis Reservoir. The CVP's Tracy Pumping Plant at the southern end of the Delta lifts water into the Delta-Mendota Canal for delivery to CVP contractors. The CVP has organized its facilities and operations into the Trinity River, Shasta and Sacramento River, American River, Eastside, Delta, West San Joaquin, San Felipe, and Friant Divisions. CVP water users include Sacramento River water rights contractors, San Joaquin River exchange contractors, CVP water service contractors, Friant Division contractors, and Cross Valley Canal contractors; these contractors have a wide variety of contract provisions for water service with Reclamation.

Delta	The legal Delta, as described in the California Water Code Section 12220, generally extends from Sacramento to the north, at the I Street Bridge, Tracy to the south, Interstate 5 to the east, and Collinsville to the west. The Delta covers approximately 738,000 acres.
Decision 1485	The SWRCB's Water Right Decision 1485 established terms and conditions regulating operations of the SWP and CVP. The Decision went into effect in 1978, but was disapproved by the California courts in <i>United States v. State Water Resources Control Board</i> . 182 Cal.App.3d 82 (1986). Nevertheless, the Decision remained effective until it was modified in 1995 (95-06) and 1998 (98-09), and was superseded by Decision 1641 in 1999 (as revised in 2000).
Endangered Species	Those species listed as endangered under FESA and CESA; any species, which is in danger of extinction throughout all or a significant portion of its range.
Endemic Species	Plant and animal species that are native to and confined to a certain region.
Extended Carryover Storage	Article 12(e) of the long-term water supply contracts allows contractors to carryover Table A water from one year to next under certain conditions. The water is temporarily stored or carried over in State Water Project reservoirs, primarily San Luis Reservoir. Article 56 of the Monterey Amendment expanded the circumstances under which contractors could carryover or temporarily store water in San Luis Reservoir. However, contractors must take delivery of carryover water before storage space in San Luis Reservoir is needed by the State Water Project. Any carryover water remaining in the reservoir when the State Water Project needs the storage capacity reverts to the State Water Project.
Federal Endangered Species Act (FESA)	The Federal Endangered Species Act of 1973 is administered by the Interior Department's U.S. Fish and Wildlife Service (USFWS) and by the Commerce Department's National Oceanic and Atmospheric Administration-Fisheries (NOAA Fisheries). FESA section 9 and its implementing regulations prohibit "take" of individual members of species listed as threatened or endangered. FESA defines "take" as meaning "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect." (16 U.S.C. § 1532(19)). "Take" may result from significant modification of habitat occupied by a listed species, but only if the modification actually causes the death or physical injury of an individual member of a listed species. (<i>Babbitt v. Sweet Home Chapter of Communities for a Great Oregon</i> , 515 U.S. 687, 700 (1985); <i>Defenders of Wildlife v. Bernal</i> , 204 F.3d 920, 924-925 (9 th Cir. 2000))
Hydrology	Science dealing with natural runoff and its effects on streamflows.
Indirect (Secondary) Impact/Effect	Environmental impact that is the indirect result of a project, such as the growth-inducing effects of building new roads and water supply infrastructure.
In-Lieu Groundwater Banking Programs	Programs where water agencies may deliver excess water (typically in wet years) to agricultural irrigators for use in-lieu of pumping groundwater. The surface water used is credited against a supply (bank) in the underlying groundwater basin, for future use by the groundwater "banking" agency.
Interruptible Water	Term given to Article 21 Water in the Monterey Amendments.
Kern Fan Element	A component of a proposed SWP groundwater bank in Kern County for use by the SWP and local agencies. The Department purchased property in Kern County for the facility and negotiated an agreement with KCWA to operate a demonstration ground water project on the property. The Department developed a First Stage Feasibility Study and Draft Supplemental EIR for the water bank.
Minimum Project Yield	The annual supply of the SWP to be made available to SWP Contractors, as determined by DWR. For modeling purposes SWP projects yield has been defined as the maximum amount of water that can be delivered on demand during the 1928-34 dry period sequence while shortages up to 25% are allocated in four years so the total shortage over the seven years is 100% of the demand. The project yield was originally estimated to be 4,000,000 AFY, was increased to 4,230,000 AFY in 1964, and decreased to 4,185,000 AFY as part of the Monterey Amendment. Under a recent amendment, estimated amounts are no longer included in the Water Supply Contract. (The project yield would be reduced under a scenario in which DWR implemented Article 18 (b); such a scenario is evaluated as part of this EIR.) In more recent years the concept of firm yield has been replaced with water delivery reliability curves which show the likelihood of water deliveries by the SWP in any year given the range of historical hydrologic events.
Non-project water	Water that is not SWP water. Other water supplies acquired by SWP contractors, or non-SWP water moved through SWP facilities.

Racanelli Decision	In 1986, the California appellate court in the Racanelli Decision (named after Judge Racanelli who wrote the opinion) broadly interpreted the State Water Resources Control Board's authority and obligation to establish water quality objectives and its authority to set water rights permit terms and conditions that provide reasonable protection of beneficial uses of Delta water and of San Francisco Bay. The court stated that State Water Resources Control Board needed to separate its water quality planning and water rights functions. State Water Resources Control Board needs to maintain a "global perspective" in identifying beneficial uses to be protected (not limited to water rights) and in allocating responsibility for implementing water quality objectives (not just to the State Water Project and Central Valley Project, nor only through the Board's own water rights processes). The court recognized the State Water Resources Control Board's authority to look to all water rights holders to implement water quality standards and advised the Board to consider the effects of all Delta and upstream water users in setting and implementing water quality standards in the Delta, as well as those of the State Water Project and Central Valley Project.
Special Status Species	Plants or animals legally protected under either the federal or California Endangered Species Acts or the California Fish and Game Code; those species not currently protected by statute, but considered to be rare or endangered under CEQA; and species considered by the scientific community to be sufficiently rare to qualify for such listing [e.g., candidate species for listing as threatened or endangered, species of special concern to the CDFG or USFWS, or rare plants identified by the California Native Plant Society (CNPS)].
State Water Project (SWP)	A term to describe all facilities for which the contractors assume a repayment obligation. Specifically, the California State Water Project is a water storage and delivery system of reservoirs, aqueducts, powerplants and pumping plants.
Surplus Water	Pre-Monterey Amendment provision of Article 21 that defined a water classification for water that the SWP could supply from reservoir storage or from the Delta; that was in excess of supplies needed for Table A deliveries, reservoir storage, regulatory requirements, and other needs; and that could be scheduled in advance of its delivery. Article 21 defined delivery priorities, scheduling, rates, and other provisions.
SWP Allocations	The percent of Table A amount, as determined by DWR, that each SWP Contractor can receive in any one year based on that year's water supply availability and Contractor requests.
Table A (Table A amounts)	The maximum amount of SWP water that the State agreed to make available for delivery to a contractor during the year. The State and SWP contractors also use Table A amounts to serve as a basis for allocation of some SWP costs among the contractors.
Threatened Species	Those species listed as threatened under FESA and CESA; any species, which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
Turnback Pool Program	A program in which Contractors with allocated Table A supplies that are in excess of their needs in a given year may turn back that excess supply for purchase by other SWP Contractors that need additional supplies that year. The Turnback Pool can make water available in all types of hydrologic years, although there is generally less excess water turned back in dry years.
Watershed	The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.
Water Supply Contracts	Contracts between DWR and individual urban and agricultural public water agencies that provide for the repayment of the SWP costs and for delivery of SWP water. (DWR 1962)
Water Transfer	Voluntary water transactions. The State agency most involved in regulatory water transfers is the State Water Resources Control Board.
Water Year	From October 1 st through the following September 30 th .
X2	The location (measured in kilometers from the Golden Gate Bridge) of 2 parts per thousand total dissolved solids. The length of time X2 must be positioned at set locations in the estuary each month is determined by a formula that considers the previous month's inflow to the Delta and a "Level of Development" factor, denoted by a particular year. X2 is currently used as the primary indicator in managing Delta outflows. The X2 indicator is also used to reflect a variety of biological consequences related to the magnitude of fresh water flowing downstream through the estuary and the upstream flow of salt water in the lower portion of the estuary. The outflow that determines the location of X2 also affects both the downstream transport of some organisms and the upstream movement of others and affects the overall water operations of the State Water Project and Central Valley Project.

ABBREVIATIONS

AB	Assembly Bill
ADA	Americans with Disabilities Act
ADEIR	Administrative Draft EIR
AF	acre-feet
AFY	acre-feet per year
amsl	above mean sea level
BCAG	Butte County Association of Governments
BCAPCD	Butte County Air Pollution Control District
BDCP	Bay-Delta Conservation Plan
BMP	best management practice
BP	before present
Cal EPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CALVIN	California Value Integrated Network
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CCWA	Central Coast Water Agency
cfs	cubic feet per second
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
CEA	Capacity Exchange Agreement
CEC	California Energy Commission
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CFS	cubic feet per second
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historic Resources Information System
Cl	Chloride
CMA	Congestion Management Agency
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPA3	Court-Ordered No Project Alternative 3
CNPA4	Court-Ordered No Project Alternative 4
CNPS	California Native Plant Society
CO	Carbon Monoxide
COA	Coordinated Operating Agreement
Corps	United States Army Corps of Engineers
CRHR	California Register of Historic Resources
CTC	California Transportation Commission
CUPA	California Unified Program Agency
CVMod	Central Valley Model
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
CWC	California Water Code

dB	Decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
Delta	Sacramento-San Joaquin River Delta
Department	California Department of Water Resources
DOT	United States Department of Transportation
DPR	California Department of Parks and Recreation
DRMS	Delta Risk Management Study
DWR	California Department of Water Resources
DWSP	Delta Water Supply Project
EC	Electrical Conductivity
EHD	Environmental Health Division
EHSD	Environmental Health Services Department
E/I	export/Delta inflow
EIR	Environmental Impact Report
EMBUD	East Bay Municipal Utilities District
EPA	United States Environmental Protection Agency
ERP	Ecosystem Restoration Program
EWA	Environmental Water Account
FCD	Flood Control District
FC&WCD	Flood Control and Water Conservation District
ft	feet
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FMWT	fall mid-water trawl
FONSI	Finding of No Significant Impact
GCM	General Circulation Model
GHG	greenhouse gas
GPCPD	gallons per capita per day
GW	giga-watts
GWh	Giga-Watt hours
HCP	Habitat Conservation Plan
HSC	Health and Safety Code
HWCL	Hazardous Waste Control Law
I-5	Interstate 5
ID	Irrigation District
IEP	Interagency Ecological Program
IPCC	Intergovernmental Panel on Climate Change
JPOD	Joint Point of Diversion
KCOG	Kern Council of Governments
KCWA	Kern County Water Agency
KFE	Kern Fan Element
KWB	Kern Water Bank
KWBA	Kern Water Bank Authority
LADWP	Los Angeles Department of Water and Power
LBNL	Lawrence Berkeley National Laboratory
LPOC	Lake Perris Operations Committee
LPSRA	Lake Perris State Recreation Area
M&I	Municipal and Industrial
MCAG	Merced County Association of Governments
MCL	maximum contaminant level
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
mg/l	milligram per liter
MID	Madera Irrigation District
MMP	Mitigation Monitoring Program
MOU	Memorandum of Understanding
MPH	Miles Per Hour
MSHCP	Multiple Species Habitat Conservation Plan
MTBE	Methyl tertiary-butyl ether

MWD	Metropolitan Water District
MWDSC	Metropolitan Water District of Southern California
mya	million years ago
NCCP	Natural Community Conservation Plan
NIH	National Institutes of Health
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Determination
NOP	Notice of Preparation
NO _x	Nitrogen Oxides
NPA1	No Project Alternative 1
NPA2	No Project Alternative 2
NPC	Nevada Power Company
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NRCS	National Resources Conservation Services
NRHP	National Register of Historic Places
NSVAB	Northern Sacramento Valley Air Basin
O ₃	ozone
OCAP	Operations Criteria and Plan
OES	Office of Emergency Services
OPR	Governor's Office of Planning and Research
PCL	Planning and Conservation League
PCWA	Placer County Water Agency
PIER	Public Interest Energy Research
PM ₁₀	Particulate Matter
POD	Pelagic Organism Decline
PRC	Public Resources Code
PRMS	Precipitation-Runoff Modeling System
PUC	Public Utilities Commission
RBDD	Red Bluff Diversion Dam
RCHCA	Riverside County Habitat Conservation Agency
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
Reclamation	United States Bureau of Reclamation
ROD	Record of Decision
ROG	Reactive Organic Gasses
RPA	Register of Professional Archaeologists
SAWA	Santa Ana Watershed Association
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SDIP	South Delta Improvement Program
SDWA	Safe Drinking Water Act
SEIS	Supplemental Environmental Impact Statement
SHOPP	State Highway Operations and Protection Program
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO _x	Sulfur Oxides
SR	State Route
SRA	State Recreational Area
SSWD	Sacramento Suburban Water District
SVWMP	Sacramento Valley Water Management Program
SWP	State Water Project
SWRCB	California State Water Resources Control Board
SWSD	Semitropic Water Storage District
TAC	Toxic Air Contaminant
TAF	Thousand acre-feet
TDF	Through-Delta Facility

TIP	Transportation Improvement Plan
TMDL	Total Maximum Daily Load
TNS	townet survey
TSM	Transportation System Management
UBC	Uniform Building Code
UCR	University of California, Riverside
USGS	United States Geological Survey
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VAMP	Vernalis Adaptive Management Program
VdB	Vibration decibel
VIC	Variable Infiltration Capacity
VOC	volatile organic carbons
WA	Water Authority or Water Agency
WD	Water District
WQCP	Water Quality Control Plan
WSD	Water Service District or Water Storage District