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CHAPTER 11. Glossary of Terms and List of Acronyms

GLOSSARY

ACRE-FOOT. The quantity of water (43,560 cubic feet or 326,700 gallons) that would cover 1 acre to a depth of 1 foot.

ALEVIN. A newly hatched salmon.

ANADROMOUS. Fish species that inhabit marine waters during juvenile and adult life stages but migrate to fresh water for spawning.

AQUIFER. A porous soil or geological formation lying between impermeable strata in which water may move for long distances; yields groundwater to springs and wells.

AREA OF ORIGIN. A commonly used term generally defined as the area in which a water supply originates. The term is based on three statutes in the California State Water Code: the County of Origin and the Watershed Protection Statutes, and the Delta Protection Act.

CANDIDATE SPECIES (ALSO CANDIDATE THREATENED OR ENDANGERED SPECIES). Taxa (species or subspecies) of plants and animals currently being considered for listing by the U.S. Fish and Wildlife Service.

CENTRAL VALLEY PROJECT YIELD. The volume of water available over a period of time from CVP facilities.

CLASS II. Contracts for water serviced after delivery of water to firm yield contractors on an "if-and-when-available basis."

COLDWATER FISHERY. Generally, water or a water system that has an environment suitable for salmonid fishes.

CONJUNCTIVE USE. A term used to describe operation of a groundwater basin in coordination with a surface water system.

CONSUMPTIVE USE. Total amount of water taken up by vegetation for transpiration or building of plant tissue, plus the unavoidable evaporation of soil moisture, snow, and intercepted precipitation associated with vegetal growth.

CONVEYANCE CAPACITY. The volume of water that can be transported by a canal, aqueduct, or ditch. Conveyance capacity is generally measured in cubic feet per second.

CORPS DELTA PUMPING CRITERIA. The Corps Delta pumping criteria were established in conjunction with the COE's decision on October 13, 1981, to suspend permit

processing and EIS preparation for a COE Section 10 permit to allow DWR to operate additional pumps at DWR's Delta Pumping Plant. COE decided that a Section 10 permit was not required, provided historical maximum diversion for the Delta Pumping Plant complex were not exceeded, and because diversion of one-third of the San Joaquin River flow at Vernalis during mid-December to mid-March when flows exceed 1,000 cfs would have an effect on navigable capacity.

CULTURAL RESOURCE. Any building site, district, structure, object, data, or other materials significant in history, architecture, archeology, or culture.

DECISION-893 (D-893). The SWRCB decision specifying current American River minimum flow standards.

DECISION-1400 (D-1400). The SWRCB decision specifying American River minimum flow standards to be implemented if Auburn Dam becomes operational.

DECISION-1485 (D-1485). The SWRCB decision specifying water quality standards for the Sacramento-San Joaquin Delta and Suisun Marsh.

DEFICIENCIES. Reductions in deliveries of contracted firm water, made necessary by critical dry hydrologic conditions. The amount of these reductions is expressed as the percent of full annual supply delivered.

DEMAND. See Water Demand.

DEPENDABLE SUPPLY CONTRACT. See Intermittent Yield.

DISCOUNT RATE. Interest rate used in the economic evaluation of a project to account for the time value of money.

DIVERSION DAM. A barrier built across a stream to divert all or some of the water.

DIVERSION STRUCTURE. A channel excavated to cause a stream or river to bypass either preliminary construction work or during construction only.

EFFLUENT. Waste material discharged into the environment from a waste water treatment facility.

ENDANGERED SPECIES. Generally taken to mean any species or subspecies whose survival is threatened with extinction.

ENERGY. The capacity for performing work. The electrical energy term generally used in kilowatt-hours (kWh) and represents power (kilowatts) operating for some time period (hours).

FARM DELIVERY REQUIREMENT (FDR). FDR is the quantity of water needed to adequately irrigate a farm. The volume is based on the number of acres of each crop grown and the acre-feet per year of water each crop requires. FDR includes water for conveyance losses and leaching of salts, if necessary.

FIRM YIELD. Firm yield has traditionally been defined as the water supply that is available throughout an historic period of record (subject to deficiencies in critically dry years) from CVP operation at an ultimate level of development. Ultimate development is the development that will exist at full water delivery (buildout) of contract and water right commitments (traditionally equated to 2020 level of development). Firm yield calculations are based on the driest series of years that occurred in the Central Valley, from 1928 through 1934. To take advantage of the abundant water supplies available in normal years, deficiency criteria have been established to moderate the effect of this critically dry period on firm yield determinations. Reclamation computes firm yield with an allowance for deficiencies totaling 100 percent of 1 year's supply during the 7-year, 1928 through 1934 dry period. Twenty-five percent deficiency is taken in the critical dry years of 1929, 1931, 1933, and 1934.

FRY. Fish between the egg and fingerling stages. Depending upon the species, fry can be a few millimeters to a few centimeters long.

GAME FISH. Fish species generally found on the higher end of the food chain and considered sport fishes by anglers.

GROUNDWATER OVERDRAFT. An unnatural increase in the depth of the groundwater table resulting from pumping groundwater for use at a rate greater than the rate of recharge.

INTERIM WATER. Interim water is the difference between the firm yield of the CVP and total contract deliveries of firm yield at any level of development. At the 2020 level, contract deliveries are expected to be at or near their maximums; interim supply, therefore, would be practically zero. Interim water can be contracted whenever contract deliveries are less than the total CVP firm yield.

INTERMITTENT YIELD. In wet, normal and some dry years, additional water is available after commitments for firm yield supplies are met. This supply is termed intermittent yield. Intermittent water may be used in combination with groundwater through a conjunctive use program to expand the total supply of water available for contracting by Reclamation. This water could be contracted on an annual, short-term (longer than 1 year but less than 20 years), or long-term (up to 40 years) basis. The amount of surface water delivered under this kind of dependable supply contract is not as dependable as firm yield since the intermittent supply depends on the wetness of the water year and the priority needs of CVP firm yield contractors. The dependability of an intermittent supply can be calculated on the basis of past hydrology and the ability to meet firm yield demands.

MITIGATION. Methods to reduce or eliminate adverse project impacts.

MODEL. A mathematical formula that expresses the actions and interactions of the elements of a system in such a manner that the system may be evaluated under any given set of conditions.

NATIONAL REGISTER OF HISTORIC PLACES. A register of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, and culture, maintained by the Secretary of the Interior.

NONGAME FISH. Fish species generally found near the lower end of the food chain and not considered sport fishes by anglers.

PEAK FLOW. The maximum discharge of a stream during a specified period of time.

PERMEABILITY. The property or capacity of a porous rock, sediment, or soil for transmitting a fluid.

RECRUITMENT. The increase in population caused by natural reproduction or immigration.

RETURN FLOW. Water that reaches surface drainage by overland flow or through groundwater discharge as a result of applied or natural irrigation.

RIPARIAN. Living on or adjacent to a water supply such as a riverbank, lake, or pond.

SACRAMENTO RIVER BASIN INDEX. An index used to classify water years. Year classification is determined by the forecast of Sacramento Valley unimpaired runoff for the current water year as published in DWR's Bulletin 120 for the sum of the following locations: Sacramento River above Bend Bridge, (near Red Bluff); Feather River, total inflow to Oroville Reservoir; Yuba River at Smartville; and American River, total inflow to Folsom Reservoir.

SAFE YIELD. The rate or amount at which an aquifer may be pumped without exceeding recharge and incurring overdraft.

SEDIMENT. Solid fragmented material that originates from weathering of rocks and is transported or deposited by air, water, or ice.

SHORTAGES. Reductions in the amount of water being delivered under contract. The amount of the reduction is based on deficiency criteria established in each contract to moderate the effects of a dry and critically dry period.

SPAWN. To lay eggs, especially said of fish.

SPECIES. The basic category of biological classification intended to designate a single kind of animal or plant.

STATE HISTORIC PRESERVATION OFFICER. The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as liaison for purposes of implementing the National Historic Preservation Act.

10(h) AGREEMENT. In 1906, the state and federal governments signed Coordinated Operation Agreement, which clarified the joint responsibility of the CVP and SWP in meeting Delta water quality standards. Subarticle 10(h) of the COA provided that Reclamation and DWR shall negotiate a contract (agreement) for DWR's conveyance (wheeling) and purchase of CVP water.

THREATENED SPECIES. A species that is likely to become endangered in the foreseeable future and is included in the federal list of threatened species.

TOXIC. Pertaining to poison.

VISITOR DAY. A standard unit of use consisting of a visit by one individual to a recreation development or area for recreation purposes during any reasonable portion or all of a 24-hour period.

UNCOMMITTED WATER. That amount of CVP firm yield that is above existing contract maximums.

WARMWATER FISHERY. Generally, water or a water system that has an environment suitable for species of fish other than salmonids.

WATER DEMAND. A monthly schedule of water deliveries added to a point of diversion or delivery in an operations planning model analysis.

WATER NEED. A monthly schedule of additional water deliveries (determined by review of farm delivery requirements, population projections, and per capita historical consumption; and reduced by feasible conservation and conjunctive use yield) that would meet net demands for a water contractor through the contract period.

WATER REQUESTS. Gross (unadjusted) annual new water for which contracts are requested by a single entity.

WATER RIGHT. A grant, permit, decree, appropriation, or claim to the use of water for beneficial purposes. California has a dual system of water rights: riparian and appropriative.

WATER USE. The quantity of water actually being diverted or assumed to be diverted in the future.

WETLANDS. Areas defined by the prevailing vegetation types and soil moisture content and that contain vegetation typical of soils that are saturated for a major portion of the year.

YIELD. The volume of water available over a period of time from a storage facility.

ACRONYMS

ADT	Average daily traffic
af	Acre-feet
af/yr	Acre feet per year
AMD	Acid mine drainage
AQMP	Air Quality Management Program
ARSA	American River Service Area

Bay	San Francisco Bay
CBD	Colusa Basin Drain
CCWD	Contra Costa Water District
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
COA	Coordinated Operation Agreement
COE	U. S. Corps of Engineers
CVP	Central Valley Project
CWA	California Waterfowl Association
Delta	Sacramento-San Joaquin River Delta
DESA	Delta Export Service Area
DFA	California Department of Food Agricultural
DFG	California Department of Fish and Game
DOI	U. S. Department of the Interior
du	Dwelling unit
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U. S. Environmental Protection Agency
ESA	Endangered Species Act
ET	Evapotranspiration
FEMA	Federal Emergency Management Agency
ft	Feet
FWCA	Fish and Wildlife Coordination Act
GWh	Gigawatt hours
IFIM	Instream Flow Incremental Methodology
kg/yr	Kilograms per year
M&I	Municipal and industrial
MDDZ	Maximum drawn down zone
mgd	million gallons per day
MW	Megawatts

NDDDB	Natural Diversity Data Base
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
PAH	Polynuclear aromatic hydrocarbons
PDC	Project dependable capacity
PL	Public Law
ppb	Parts per billion
PPM	Parts per million
RBDD	Red Bluff Diversion Dam
Reclamation	U. S. Bureau of Reclamation (U. S. Department of the Interior)
RIMS	Regional Interindustry Modeling System (U. S. Department of Commerce, Bureau of Economics)
RM	River mile
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SCS	U. S. Soil Conservation Service
SHPO	California State Historical Preservation Officer
SIP	State Implementation Plan
SRSA	Sacramento River Service Area
SRWWTP	Sacramento River Waste Water Treatment Plant
SWP	California State Water Project
SWRCB	California State Water Resources Control Board
TCC	Tehama-Colusa Canal
TCCFF	Tehama-Colusa Canal Fish Facilities
TDS	Total dissolved solids
USFWS	U. S. Fish and Wildlife Service
USGS	United States Geological Survey
WWD	Westlands Water District
FC&WCD	Flood Control and Water Conservation District
μ MHOS/CM.	Micromhos per centimeter

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