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Acronyms

Acronyms

°C	degrees Celsius
°F	degrees Fahrenheit
µg/g	micrograms per gram
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
AAC	All American Canal
AAM	annual arithmetic mean
AB	Assembly Bill
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
AF	acre feet/foot
AFY	acre feet per year
AGM	annual geometric mean
AOP	Annual Operating Plan
AQIA	air quality impact analysis
AQMP	Air Quality Management Plan
AWC	Arizona Wildlife of Concern
AZ DES	Arizona Department of Economic Security
BA	Biological Assessment
BACT	Best Available Control Technology
Basin	Colorado River Basin
Basin States	Arizona, Colorado, California, New Mexico, Utah, Wyoming
BCPA	Boulder Canyon Project Act of 1928
BIA	US Bureau of Indian Affairs
BLM	US Bureau of Land Management
BMP	Best Management Practice
BNSF	Burlington Northern and Santa Fe
BO	Biological Opinion
BOD	biological oxygen demand
BOE	Bureau of Census
CAA	Federal Clean Air Act of 1970 and its 1977 and 1990 Amendments
CAAQS	California Ambient Air Quality Standards
California Plan	California's Colorado River Water Use Plan
CAP	Central Arizona Project
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDC	California Development Company
CDCA	California Desert Conservation Area

CDFG	California Department of Fish and Game
CDMG	California Department of Conservation Division of Mines and Geology
CDOF	California Department of Finance
CEDD	California Employment Development Department
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CID	Cibola Irrigation District
CII	commercial, industrial, and institutional
CIMIS	California Irrigation Management Information System
CIP	Capital Improvement Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
COC	constituent of concern
COD	chemical oxygen demand
Compact	Colorado River Compact of 1922
Corps	US Army Corps of Engineers
CRA	Colorado River Aqueduct
CRBC	Colorado River Board of California
CRB RWQCB	Colorado River Basin Regional Water Quality Control Board
CRHR	California Register of Historic Places
CRIT	Colorado River Indian Tribes
CRSS	Colorado River Simulation System Model
CRW	Colorado River water
CRWQCB	California Regional Water Quality Control Board
CRWUA	Colorado River Water Users Association
CSBOE	California State Board of Equalization
CSC	California species of special concern
CTR	California Toxics Rule
CUWCC	California Urban Water Conservation Council
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSC	Coachella Valley Stormwater Channel
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CWA Act	County Water Authority Act
dB	decibel
dba	A-weighted decibel scale
DCA	dichloromethane
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane

Decree	Decree in <u>Arizona v. California</u>
DEQ	Arizona Department of Environmental Quality
DHCS	Drain Habitat Conservation Strategy
DHS	California Department of Health Services
DOC	United States Department of Commerce
DOF	California Department of Finance
DOI	US Department of Interior
DOQQ	Digital Orthophoto Quarter Quadrangles
DOT	United States Department of Transportation
DPR	California Department of Parks and Recreation
Draft EIR/EIS	Draft Environmental Impact Report/Environmental Impact Statement
dw	dry weight
DWQIP	Drain Water Quality Improvement Plan
DWR	California Department of Water Resources
EBEP	Enclosed Bays Estuaries Plan
ECVP	Eastern Coachella Valley Plan
EDD	California Employment Development Department
EIR	environmental impact report
EIS	environmental impact statement
EPA	United States Environmental Protection Agency
EPDC	expected peak day concentration
EQIP	Environmental Quality Incentives Program
ERL	effects range low
ERM	effects range medium
ESA	Federal Endangered Species Act
ESP	Emergency Storage Project
ET	evapotranspiration
FAIRA	Federal Agriculture Improvement and Reform Act
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy Management Act
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act of 1981
ft	feet
ft/s	foot per second
FWCA	Fish and Wildlife Coordination Act of 1958
FWQA	Federal Water Quality Administration
FY	fiscal year
GIS	Geographic Information System
g/L	grams per liter
GM	geometric mean
HCP	Habitat Conservation Plan
HCP IT	Habitat Conservation Plan Implementation Team
HCP-SS	Salton Sea Habitat Conservation Strategy
HHI	health hazard index

IA	Implementation Agreement
IBWC	International Boundary Water Commission
ICAPCD	Imperial County Air Pollution Control District
ID	Irrigation District
IID	Imperial Irrigation District
IID Board	IID Board of Directors
IIDSS	Imperial Irrigation Decision Support System
ILC	Imperial Land Company
in/yr	inches per year
I-O	input-output
IOP	Inadvertent Overrun and Payback Policy
ISG	Interim Surplus Guidelines
ISM	Index Sequential Method
ISWP	Inland Surface Waters Plan
IT	Implementation Team
ITA	Indian Trust Asset
ITP	Incidental Take Permit
IWA	Imperial Wildlife Area
KAF	thousand acre-feet
KAFY	thousand acre-feet per year
KCRC	Kumeyaay Cultural Repatriation Committee
kg/ha/yr	kilogram per hectare per year
KGRA	known geothermal resource areas
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hours
LCR	Lower Colorado River
LCRAS	Lower Colorado River Accounting System
LCR MSCP	Lower Colorado River Multi-Species Conservation Program
L _{dn}	day/night average sound level
L _{eq}	equivalent noise level
LOS	level of service
LTVA	Long-Term Visitation Area
M	meter
M&I	municipal and industrial
MAF	million acre-feet
MAFY	million acre-feet per year
MAL	Maximum Allowable Limit
MCL	Maximum Contaminant Level
MCSP	Lower Colorado River Multi-Species Conservation Program
MDAQMD	Mojave Desert Air Quality Management District
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MHCP	Multiple Habitat Conservation Program
MHOCSP	Multiple Habitat Conservation and Open Space Program

MIG	Minnesota IMPLAN Group
MLD	Most Likely Descendant
mm	millimeter
MMI	Modified Mercalli Intensity
MOA	Memorandum of Agreement
Model	Salton Sea Accounting Model
MOU	Memorandum of Understanding
mph	miles per hour
MSCP	Multi-Species Conservation Program
MSHCP	Multiple Species Habitat Conservation Plan
msl	mean sea level
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWh	million-kilowatt hour
Mwhr	megawatt-hours
NAAQS	National Ambient Air Quality Standards
NCCP	National Communities Conservation Plan
N/DV	No. of collected samples per samples with detectable values
NECO	Northern California and Eastern Colorado Desert Coordinated Ecosystem Management Plan
NEPA	National Environmental Protection Act
NHPA	National Historic Preservation Act
NIB	Northerly International Boundary
NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOD	Notice of Determination
NOE	Notice of Exemption
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NSR	New Source Review
NTP	Notice to Proceed
NTR	National Toxics Rule
NWR	National Wildlife Refuge
O&M	Operations and Maintenance
OHV	off-highway vehicle
O ₃	ozone
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyl
P - DP	Parker - David Project
PEIR	Programmatic Environmental Impact Report

PL	Public Law
PM ₁₀	particulate matter with a diameter of less than 10 micrometers
ppb	parts per billion
PPR	Present Perfected Rights
ppm	parts per million
ppt	parts per trillion
PRC	Public Resources Code
PRG	Preliminary Remediation Goal
Proposed Project	Water Conservation and Transfer Project
PSD	prevent significant deterioration
PUD	Public Utilities District
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement
RCPG	Regional Comprehensive Plan and Guide
Reclamation	United States Department of Interior Bureau of Reclamation
RGF	Regional Growth Forecast
RHNA	Regional Housing Needs Assessment
RMIO	rainfall, municipal, industrial, and operational
ROC	reactive organic compounds
ROD	Record of Decision
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SANDAG	San Diego Association of Governments
SAR	sodium absorption ratio
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCWRRS	Southern California Comprehension Water Reclamation and Reuse Study
SCE	Southern California Edison
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas and Electric
Sea	Salton Sea
Secretary	Secretary of the Interior
Seven-Party Agreement	California Seven-Party Agreement of 1931
SHPO	State Historic Preservation Officer
SIA	Secretarial Implementation Agreement
SIP	State Implementation Plan
SLC	California State Lands Commission
SO ₂	sulfur dioxide
SPRR	Southern Pacific Railroad
SR	State Route
SRA	State Recreation Area

SSA	Salton Sea Authority
SSAB	Salton Sea Air Basin
SSAM	Salton Sea Accounting Model
SVOC	semivolatile organic compounds
SVRA	State Vehicular Recreation Area
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
TA	tailwater volume
TBACT	toxics best available control technology
TCP	traditional cultural properties
TDS	total dissolved solids
THM	trihalomethane
TI	tilewater volume
TMDL	Total Maximum Daily Load
TRS	tailwater return system
TSS	total suspended solids
ULFT	ultra-low-flow toilet
US	United States
USBEA	United States Department of Commerce Bureau of Economic Analysis
USC	United States Code
USDA	United States Department of Agriculture
USDOE	United States Department of Energy
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VOC	volatile organic compound
Water Code	California Water Code
WA	Wildlife Area
WCMC	Water Conservation Measure Committee
WD	Water District
WMA	Wildlife Management Area
WRCC	Western Regional Climate Center
ww	wet weight

Glossary

Absorption	The process by which a substance is taken into and included within another substance (i.e., the intake of water by soil or the intake of gases, water, nutrients, or other substances by plants).
Acre-foot (AF)	A quantity of water sufficient to cover one acre to a depth of one foot (i.e., 43,560 cubic feet or 325,851 gallons).
Existing Setting	Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as a result of a proposed human action.
Allocation or Allotment	Refers to the distribution of water to specific persons or legal entities. A written contract establishes the legal entitlement to consume shares of a specific quantity of water.
Apportionment	For this Draft EIR/EIS, refers to the allocation of water available to each Lower Division state in normal, surplus, or shortage year, as set forth, respectively, in Articles II (B)(1), II (B)(2), and II (B)(3) or the Decree in <i>Arizona v. California</i> .
Appropriative Right	A right based on physical control of water and since 1914, a state-issued permit of license for its beneficial use.
Aqueduct	A pipe or channel designed to transport water from a remote source, usually by gravity.
Aquifer or Groundwater Basin	A geologic formation that stores, transmits and yields significant quantities of water to wells and springs.
Backwater	A relatively small, shallow area of a river with little or no current.
Benthic	Of, relating to, or occurring at the bottom of a body of water.
Biological Opinion	Document stating USFWS and NMFS opinion as to whether a federal action is likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction or adverse modification of critical habitat.
Candidate Species	Plant or animal species not yet officially listed as threatened or endangered, but which is undergoing status review by USFWS.

Carriage Water	An additional amount of water or flow required to account for seepage and evaporation losses, measurement discrepancies between farm turnouts, and lateral heading measurements (the measurement device at the lateral heading may not equal the sum of farm turnout measurement devices along the lateral), and water depths (hydraulic head) in some cases to ensure the full delivery demands at farm turnouts particularly at the end of a lateral. For example, if a water used at the end of a lateral requires 2 cfs, more than likely 2.1 cfs is diverted at the lateral heading to account for the above items. Open channel delivery systems, lined or unlined, are not 11 percent efficient.
Colorado River Basin	The drainage basin of the Colorado River in the US.
Common Law	A body of court decisions based on custom, traditional usage and precedent, as that of England, rather than codified written laws.
Conjunctive Use	The planned use and storage of surface and groundwater supplies to improve water supply reliability.
Consumptive Use	<p>A use that makes water unavailable for other uses, usually by permanently removing it from local surface or groundwater storage as the result of evaporation and/or transpiration. Does not include evaporative losses from bodies of water.</p> <p>For this Draft EIR/EIS, the total water diversions from the Colorado River, less return flows to the River.</p>
Consumptive Use of Applied Water	Consumptive use less the water supplied by precipitation.
Critical Habitat	Specific areas with physical or biological features essential to the conservation of a listed species and that may require special management considerations or protection. These areas have been legally designated via <i>Federal Register</i> notices.
Cropping Pattern	The acreage distribution of different crops in any period, usually one year in a given area such as a county, water agency, or farm.
Cultural resource	Building, site, district, structure, or object significant in history, architecture, archeology, culture, or science.
Deep percolation	The movement of water by gravity downward through the soil profile beyond the crop root zone.
Depletion	Loss of water from a stream, river, or basin resulting from consumptive use.

Discretionary Transfer Amount	The optional conservation and transfer of an additional amount of water up to 100 KAFY to CVWD and/or MWD, contingent upon IID's determination that the additional conserved water is available and SDCWA's determination of need.
Endangered Species	A species or subspecies (plant or animal) whose survival is in danger of extinction throughout all or a significant portion of its range.
Endemic	Existing naturally in the environment.
Entitlement	For this Draft EIR/EIS, refers to an authorization to beneficially consume Colorado River water pursuant to: (1) a decreed right; (2) a contract with the Secretary; or (3) a Secretarial reservation of water.
Environmental Impact Report (EIR)	A California state environmental decisionmaking report pursuant to the California Environmental Quality Act (CEQA).
Environmental Impact Statement (EIS)	A federal environmental decisionmaking report pursuant to the National Environmental Policy Act (NEPA).
Eutrophic	Describing a shallow water body with abundant organic matter and deficient levels of dissolved oxygen.
Evaporation	The process of liquid water becoming water vapor, including vaporization from water and land surfaces, but not from plant surfaces.
Evapotranspiration (ET)	The sum of water transpired and evaporated from plants and surrounding soil surfaces, expressed in feet per year.
Fallowed land	Land normally used for crop production but left uncultivated for one or more growing seasons.
Fingerlings	Juvenile forms of fishes.
Fishery	A collection of fishes that are of sport or commercial value.
Flow	Volume of water passing a given point per unit of time expressed in cfs. <i>Peak flow</i> - Maximum instantaneous flow in a specified period of time. <i>Return flow</i> - Portion of water previously diverted from a stream and subsequently returned to that stream or to another body of water.

Food web	Food and feeding interrelationship between plants and animals.
Forage fish	A fish that is eaten by other fish or other animals.
Gaging station	Specific location on a stream where systematic observations of hydrologic data are obtained through mechanical or electrical means.
Groundwater	Waters in groundwater basins (aquifers), underground streams, and underground flow of a surface stream
Habitat	(1) A specific set of physical conditions that surrounds a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space. (2) The natural home or dwelling place of an organism.
Headgate	A manmade structure that diverts surface water.
Headwater	The source and upper part of a stream, lake, or river.
Herbivorous	Plant eating.
Hydroelectric Power	Electrical capacity produced by falling water.
Hydrology	The study of the science of water focussing on natural runoff and its effect on streamflow
Invertebrates	Animals without backbones.
Irrecoverable Water	That portion of delivered water degraded through beneficial use to a level that makes it uneconomical to reclaim or reuse.
Lacustrine	Lake-type environments with slower moving waters.
Lacustrine Basin	A low area formed at the bottom of a lake from material deposited in lake water and exposed when the water level was lowered.
Lateral Canal	Carries water from main canals to agricultural fields.
<i>Law of the River</i>	As applied to the Colorado River, a combination of federal and state statutes, interstate compacts, court decisions and decrees, federal contracts, an international treaty with Mexico, and formally determined operating criteria.
Leach Water	Water applied to flush excess salts from the root zone.
Lead Agency	The agency initiating and overseeing the preparation of an EIR and/or EIS.
Load	Amount of electrical power or energy delivered or required at a given point.

Lower Basin	The part of the Colorado River watershed below Lee Ferry, Arizona; covers parts of Arizona, California, Nevada, New Mexico, and Utah.
Lower Division	A division of the Colorado River system that includes the states of Arizona, Nevada, and California.
Lower Division States	Arizona, California, and Nevada as defined by Article II of the Colorado River Compact of 1922.
Macroinvertebrate	Animals without backbones that are large enough to be seen with the naked eye.
Mean Sea Level	National Geodetic Vertical Datum (NGVD) of 1929.
Megawatt (MW)	One million watts of electrical power (capacity).
Megawatt hour (MWh)	One million watt-hours of electrical energy.
Natural flow	Water flow that would exist without reservoir regulation, depletion, or out-of-basin diversions.
Nonoverlying	Land which is not located above a common aquifer and does not possess a shared right to a groundwater aquifer.
Nonriparian	Not pertaining to the bank of a river or any area where water naturally touches land.
Omnivorous	Meat and plant eating.
Overlying Right	A concept in which all property owners above a common aquifer possess a shared right to reasonable use of the groundwater aquifer.
Percolation	A qualitative term applying to the downward movement of water through soil, especially the downward flow of water in saturated or nearly saturated soil at hydraulic gradients of one or less.
Perennial plant	A plant that has a life cycle of 3 years or more.
Permeability	The rate at which water moves through a wetted soil, expressed in inches per hour.
pH	A measure of acidity; equal to the negative logarithm of the hydrogen ion concentration.
Phytoplankton	Free-floating plants that are usually one-celled or composed of few cells.
Piscivorous	Fish eating.
PM ₁₀	Particulate matter less than 10 microns in diameter.

Point of Diversion	The point at which water is diverted from flowing in a particular direction.
Precipitation	The total measurable supply of water to all forms of falling moisture, including dew, rain, mist; snow, hail, and sleet; usually expressed as depth of water on a horizontal surface on a daily, monthly, or yearly basis.
Present Perfected Rights	Water rights based upon diversion and beneficial use prior to the effective date of the Boulder Canyon Project (June 25, 1929). Generally these “perfected” water rights have a high priority as a result of their early date of diversion.
Primary Transfer Amount	An annual amount of water to be transferred to SDCWA as determined by IID; between a minimum of 130 KAFY and a maximum of 200 KAFY.
Priority	A ranking with respect to diversion of water relative to other water users.
Quantification Period	The 75-year period that the IA and QSA would be in effect.
Reach	A specified segment of a stream, channel, or other water conveyance.
Refugia	Isolated habitats that retain environmental conditions that were once widespread.
Reasonable and Beneficial Use	<p>Refers to the appropriate consumptive use of water by an entitlement holder based on such factors as location of use, purpose of use, types of crops, condition of delivery facilities and past record of water orders.</p> <p>A California constitutional requirement that all water resources must be put to beneficial use preventing waste or unreasonable method of use.</p>
Return Flow	The portion of diverted water that returns to groundwater or stream system for potential redirection or in-stream uses.
Right	A claim or title to anything that is enforceable by law such as a right to use water.
Riparian	Pertaining to the bank or shore of a water body.
Riverine	Riverlike environments with relatively fast-moving waters.
RiverWare	A commercial river system simulation computer program that was configured to simulate operation of the Colorado River for this EIS.

Ruderal	Vegetation that grows in response to human disturbances (e.g., along roadsides, field borders, or railroad rights of way).
Runoff	Water that leaves an area or field as surface flow.
Salinity	Total amount of dissolved solids in water in parts per million by weight when all carbonate is converted to oxide, bromide and iodide to chloride, and all organic matter is oxidized. Roughly equivalent to milligrams per liter.
Secretary	Secretary of the Interior of the United States of America.
Sediment	Unconsolidated solid material that comes from weathering of rock and is carried by, suspended in, or deposited by water or wind.
Seepage	Downward or lateral movement of water from a reservoir, canal, or pipe through a pervious or semipervious bottom.
Soluble	Capable of being dissolved in a fluid.
Statutory Law	A body of law based on statutes enacted by a legislature.
Structure (soil)	The arrangement of primary soil particles into compound particles or aggregates that are separated from adjoining aggregates.
Substrates	Solid materials to which organisms are attached or upon which they live.
Tailwater	Surface water runoff occurring at the end of an irrigated field when water that had been applied exceeds soil infiltration rates.
Texture (soil)	Relative proportion of sand, silt, and clay particles in a particular type of soil.
Threatened Animal Species	Any animal species likely to become endangered within the foreseeable future throughout all or a significant part of its range.
Threatened Plant Species	Any species likely to become endangered within the foreseeable future throughout all or a significant portion of its range, including species categorized as rare, very rare, or depleted.
Tile Water	Water collected in the tile drains on irrigated areas.
Tolerance Limits	Maximum or minimum criteria required to support life.
Total Dissolved Solids (TDS)	The total dry weight of solids dissolved in a liquid per unit volume (e.g., milligrams per liter).

Transpiration	The physiological process in which plant tissues give off water vapor to the atmosphere.
Tributary	River or stream flowing into a larger river or stream.
Trophic Dynamics	The interrelationship between different levels in the food chain depicting the passage of energy between trophic levels.
Trophic Levels	A nourishment level in a food chain in which organisms obtain their food in the same number of steps or in the same general manner. Plant producers constitute the lowest level, followed by herbivores and a series of carnivores at the higher levels.
Turnout	Device used on canals and laterals to deliver water to individual farm fields.
Upper Basin	The part of the Colorado River watershed above Lee Ferry, Arizona; that covers parts of Arizona, Colorado, New Mexico, Utah, and Wyoming.
Upper Division	A division of the Colorado River system that includes the states of Colorado, New Mexico, Utah, and Wyoming.
Vegetation type	A plant community with specific distinguishable characteristics described by the dominant vegetation present.
Water Conservation	Planned management to prevent or reduce loss or waste of water to enhance beneficial uses.
Watershed	An area that, because of topographic slope contributes water to a specified surface water drainage system, such as a stream or a river.
Wetlands	Periodically, seasonally, or continuously submerged landscapes populated by species and/or life forms differing from adjacent communities.
Zanjero	An IID employee responsible for control of water within a “run” of laterals and/or minor canals and at farm turnouts within his run or area of responsibility; also called the water tender or ditchrider.