

ACRONYMS, ABBREVIATIONS AND GLOSSARY

Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADFW	average dry weather flow
ADI	Area of Direct Impact
af	acre-feet
AFY	acre-feet per year
ALS	advanced life support
amsl	above mean sea level
APE	Areas of Potential Effect
ASA	Area of Sensitivity Assessment
Basin Plan	North Coast Water Quality Control Plan
BA	Biological Assessment
BAAQMD	Bay Area Air Quality Management District
BEP	Business Emergency Plan
bgs	below ground surface
BLS	basic life support
BMPs	Best Management Practices
BOD	biochemical oxygen demand
CA FID	California Facility Inventory Database
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention Program
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation

CARB	California Air Resources Board
CBC	California Building Code
CC	California Coast
CCC	California Coastal Commission
CCR	California Code of Regulations
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CDPH	California Department of Public Health
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH ₄	methane
CHMIRS	California Hazardous Material Incident Report System
CHSC	California Health and Safety Code
CIP	Capital Improvements Program
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent
CSC	California Species of Special Concern
CTR	California Toxics Rule
CTS	California tiger salamander
CUPA	Certified Unified Program Agency
CUWCC	California Urban Water Conservation Council
CWA	Clean Water Act
cy	cubic yards

CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibels
dbh	diameter at breast height
DEIR	Draft Environmental Impact Report
DO	dissolved oxygen
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EMI	Emissions Inventory Data
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Science Associates
FCWCD	Flood Control and Water Conservation District
FEMA	United States Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FINDS	Facility Index System
FMMP	Farmland Mapping and Monitoring Program
FMA	Flood Mitigation Assistance
FMP	Fisheries Management Plan
FPD	Fire Protection Department
FPP	Farmland Protection Program
FPPA	Farmland Protection Policy Act
FRHZ	Fault Rupture Hazard Zone
ft	feet
FTA	Federal Transit Administration
g	gravity
GHG	Greenhouse Gases
HCP	Habitat Conservation Plan

HHW	higher high water
HMBP	Hazardous Materials Business Plan
Hz	hertz
IBC	International Building Code
ICBO	International Conference of Building Officials
ICC	International Code Council
IHA	Incidental Harassment Authorization
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
km	kilometers
KOP	Key Observation Point
kV	kilovolt
kwH	kilowatt hours
LAFCO	Local Agency Formation Commission
LCP	Local Coast Plan
L_{dn}	day-night average noise level
L_{eq}	equivalent sound level
L_{eq}	energy-equivalent noise level
LESA	Land Evaluation and Site Assessment
lf	linear feet
L_{max}	The instantaneous maximum noise level
L_{max}	maximum noise level
LOS	Level of Service
LUST	leaking underground storage tank
M	Richter magnitude
M&I	municipal and industrial
MBTA	Migratory Bird Treaty Act
mg	milligrams
mg/L	milligrams per liter
mgd	million gallons per day
MHHW	mean higher high water
MLLW	mean lower low water
MLPA	Marine Life Protection Act
MMPA	Marine Mammal Protection Act

MMI	Modified Mercalli Intensity
MP	milepost
MPAs	Marine Protected Areas
mph	miles per hour
MPN	most probable number
MRZ	Mineral Resources Zone
MSDS	Material Safety Data Sheet
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSL	mean sea level
M _w	Moment magnitude
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NBBR	Nesting Breeding Birds and Raptors
NGVD	National Geodetic Vertical Datum of 1929
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NO _x	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NPPA	Native Plant Protection Act
NRCS	National Resource Conservation Service
NWIC	Northwest Information of the California Historical Resources Information System
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OES	California Office of Emergency Services
OHP	California Office of Historic Preservation
OHW	Ordinary high water
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act

PFMC	Pacific Fishery Management Council
PG&E	Pacific Gas & Electric Company
PGA	Peak ground acceleration
Plan	Sonoma Coast State Park General Plan and EIR
PM 10	Particulate matter \leq 10 microns
PM 2.5	Particulate matter \leq 2.5 microns
PM	particulate matter
POD	Pelagic Organism Decline
ppm	parts per million
ppt	parts per thousand
PPV	peak particle velocity
PRC	Public Resources Code
PSHA	probabilistic seismic hazard assessment
PVP	Potter Valley Project
PWA	Philip Williams & Associates, Ltd.
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RH Plan	Regional Haze Plan
RMP	Risk Management Plan
RMS	root mean square
RPA	Reasonable and Prudent Alternatives
RPM	Reasonable and Prudent Measures
ROG	Reactive organic gases
RRCSCBP	Russian River Coho Salmon Captive Broodstock Program
RRCSD	Russian River County Sanitation District
RRCWD	Russian River County Water District
RRU	Russian River Utility
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAPOSP	Sonoma County Agriculture Preservation and Open Space District
SCTA	Sonoma County Transportation Agency
SCWA	Sonoma County Water Agency
SCWMA	Sonoma County Waste Management Agency

SDC	Seismic Design Category
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLIC	Spills, Leaks, Investigation, and Cleanup
SMARA	Surface Mining and Reclamation Act
SMP	Stream Management Plan
SMR	state marine reserve
SO ₂	sulphur dioxide
SOI	Sphere of Influence
SOP	Standard Operating Procedures
SR	State Route
SSWD	Sweetwater Springs Water District
SVFRA	Sonoma Valley Fire and Rescue Authority
SWEEPS	Statewide Environmental Evaluation and Planning System
SWF/LF	Solid Waste Facilities/Landfill Sites
SWMP	Stormwater Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
SWRCY	Recycling Facilities in California Database
T&E	Threatened and Endangered
TAC	toxic air contaminants
TDS	total dissolved solids
TMDL	Total Maximum Daily Load
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
UC	University of California
UGB	Urban Growth Boundary
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

UST	underground storage tank
UV	ultraviolet light
VdB	Decibel notation
Water Agency	Sonoma County Water Agency
WDS	Waste Discharge System
WMI	Waste Management Incorporated
WMUDS/SWAT	Waste Management Unit Database System
WQCP	Water Quality Control Plans
WQOs	water quality objectives
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
$\mu\text{S}/\text{cm}$	microsiemens per centimeter

Glossary of Terms

100-year flood	A flood which has a one percent chance of being equaled or exceeded in magnitude in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years.
acre-foot (AF)	The volume of water that would cover 1 acre to a depth of 1 foot. Equal to 1,233.5 cubic meters (43,560 cubic feet).
active fault	Defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years).
anadromous fish	Fish that spend a part of their lifecycle in the sea and return to freshwater streams to spawn.
beneficial uses	Those uses of water as defined in the State of California Water Code (Chapter 10, Part 2, Division 2), including but not limited to, agricultural, domestic, municipal, industrial, power generation, fish and wildlife, recreation, and mining.
Biological Opinion	Document issued under the authority of the Federal Endangered Species Act stating the findings of the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service as to whether a federal action is likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction of adverse modification of critical habitat.
California Environmental Quality Act (CEQA)	Act requiring California public agency decision-makers to document and consider the environmental impacts of their actions. Also requires an agency to identify ways to avoid or reduce environmental damage and to implement those measures where feasible. Provides means to encourage public participation in the decision-making process.

channel	Natural or artificial watercourse, with a defined bed and banks to confine and conduct continuously or periodically flowing water.
CNEL	Community Noise Equivalent Level adds a 5-dBA “penalty” for the evening between 7:00 p.m. and 10:00 p.m. in addition to a 10-dBA penalty between 10:00 p.m. and 7:00 a.m. See also “decibel (dB)”, below.
cooperating agency	Any federal agency other than the lead agency that has jurisdiction by law or special expertise with respect to the environmental impacts expected to result from a proposed project.
criteria air pollutants	Pollutants that are the primary focus of regulatory agencies as indicators of ambient air quality, which include ozone, carbon monoxide (CO), nitrogen dioxide (NO ₂), sulfur dioxide (SO ₂), particulate matter (PM), and lead. These are the most prevalent air pollutants known to be harmful to human health, and extensive documentation on health-effects criteria is available for them.
critical habitat	An area designated as critical habitat listed in 50 CFR Parts 17 or 226 (50 CFR Section 402.02); specific geographic areas, whether occupied by special-status species or not, that are determined to be essential for the conservation and management of the special-status species, and that have been formally described in the Federal Register.
cultural resource	An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. Properties such as landscapes or districts, sites, buildings, structures, objects, or cultural practices that are usually more than 50 years old and possess architectural, historic, scientific, or other technical value.
cumulative impact	For NEPA purposes, defined in Council of Environmental Quality (CEQ) regulations as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Under CEQA, defined as the change in the environment that results from the incremental impact of the project when added to other, closely related past, present, and reasonably foreseeable probable future projects.
decibel (dB)	A unitless measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals. An A-weighted dB (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear. A measurement that includes the low frequency component is denoted by dBL.
dewater	To remove water.

DNL	The 24-hour day and night A-weighted noise exposure level, which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (“penalizing” nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to take into account the greater annoyance of nighttime noises.
endangered species	Any species or subspecies of bird, mammal, fish, amphibian, reptile, or plant that is in serious danger of becoming extinct throughout all or a significant portion of its range. Official federal designations of endangered species are made by the USFWS or NMFS and published in the Federal Register. Species are listed under the California Endangered Species Act by the California Department of Fish and Game.
Endangered Species Act (ESA)	The federal or state acts administered by the USFWS/NMFS and California Department of Fish and Game, respectively, to list and protect animal and plant species that are listed as threatened or endangered, are formally recognized candidates for listing, or are declining to a point where they may be listed.
Environmental Impact Report (EIR)	A detailed statement (i.e., report) prepared under the California Environmental Quality Act by a state or local agency describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects.
erosion	The gradual wearing away of land by water, wind, and general weather conditions; the diminishing of property by the elements. With regard to levees specifically: loss of levee material as a result of the effects of channel flows, tidal action, boat wakes, and wind-generated waves.
Essential fish habitat (EFH)	Defined in the Magnuson-Stevens Fishery Conservation and Management Act as waters or substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.
expansive soils	Soils that shrink and swell as a result of moisture changes.
fault	A planar rock fracture which shows evidence of relative movement. Large faults within the Earth’s crust are the result of differential or shear motion.
fault rupture	Displacement at the earth’s surface resulting from fault movement associated with an earthquake.
federal P&Gs	Principles and Guidelines for federal water studies, published as “Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies” by the U.S. Water Resources Council, 1983.

Fisheries Management Plan (FMP)	Required under the Magnuson-Stevens Fishery Conservation and Management Act to address long-term viability of fisheries, allow overfished stocks to recover; and to conserve and manage fishery resources.
floodplain	Any land area susceptible to inundation by floodwaters from any source.
flow	The volume of water passing a given point per unit of time.
groundwater	Any water naturally stored underground in aquifers, or that flows through and saturates soil and rock, supplying springs and wells.
habitat	The specific area or environment in which a particular type of animal or plant lives.
HAZNET	A California Department of Toxic Substances Control database that records annual hazardous waste shipments, as required by RCRA. All businesses that use and dispose of hazardous materials are entered into the database.
HIST UST	Contains a list of registered historical USTs
Important Farmland	Farmland categories mapped by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance are often described together under the term "Important Farmland."
infiltration	Process by which water on the ground surface enters into, or percolates through the soil
L50	The noise level that is equaled or exceeded 50 percent of the specified time period. The L50 represents the median sound level.
L90	The noise level that is equaled or exceeded 90 percent of the specified time period. The L90 is sometimes used to represent the background sound level.
Leq	The equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The Leq is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
levee	An embankment raised to restrict a river to a defined channel.
liquefaction	The process in which soil loses cohesion when subject to seismic activity (i.e., shaking).
Lmax	The instantaneous maximum noise level for a specified period of time.

Microconstituents	Microconstituents is a term currently used to describe a variety of natural and manmade substances, including pharmaceuticals, household cleaning products, personal care products, plastics, packaging, and other products of a developed society.
modeling	Computer simulations of natural and man-made water systems used to provide a forecast of outcomes for a variety of parameters, such as water quality, flow rates, and reservoir levels, under an assumed set of conditions.
non-attainment	The Clean Air Act (1990) defines this as a locality where pollution levels persistently exceed national ambient air quality standards, or which contributes to ambient air quality in a nearby area that fails to meet standards.
Notice of Availability (NOA)	The notice issued by a local, state, or federal agency to publicly announce that a draft environmental impact report is available for review, pursuant to the California Environmental Quality Act.
Notice of Preparation (NOP)	The notice issued by a state or local agency to publicly announce its intention to prepare an environmental impact report, pursuant to the California Environmental Quality Act.
Proposed Project	Russian River Estuary Management Project
reservoir	An artificially impounded body of water.
responsible agency	As per the CEQA Guidelines, a public agency other than the lead agency that has discretionary approval over a project.
riparian area	The land adjacent to a natural watercourse such as a river or stream. When sufficient to overhang the bank or fall into the water, riparian areas support vegetation that provides important wildlife and fish habitat.
salinity	The amount of dissolved salts in a given volume of water.
seawater intrusion	The intrusion and mixing of saline or brackish water into a body of freshwater.
sedimentation	The phenomenon of sediment or other fine particulates entering a water body, or being disturbed from the bottom of a water body such that they move downstream and settle on the substrate in other aquatic areas.
seiche	A wave on the surface of a lake or landlocked bay caused by atmospheric or seismic disturbances.
seismicity	The frequency, intensity, and distribution of earthquake activity in a given area.
siltation	Sediment influx either from erosion or sediment carried into a water body by inflowing rivers and tributaries.

special-status species	Federal and state classifications for plant and animal species that are listed as threatened or endangered, are formally recognized candidates for listing, or are declining to a point where they may be listed.
stage	Water surface elevation; the elevation above mean sea level (msl) datum (typically measured in feet msl).
stormwater	Untreated surface runoff into a body of water during periods of precipitation.
Stormwater Pollution Prevention Plan (SWPPP)	Required to be developed and implemented when an entity is obtaining a General Permit under the National Pollutant Discharge Elimination System (NPDES). The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of best management practices to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges.
take	Defined in the Federal Endangered Species Act as “. . .harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct” on special-status species covered under the Act.
terrestrial species	Types of species of animals and plants that live on or grow from the land.
threatened species	Legal status afforded to plant or animals species that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range, as determined by the U.S. Fish and Wildlife Service or National Marine Fisheries Service for federal species and by the California Department of Fish and Game for state species.
tidal flow	Water movements caused by tidal forces (i.e. gravitational); used to describe the movement of water in Delta channels caused by tidal level variations propagating from San Francisco Bay.
total organic carbon (TOC)	A measure of organic matter content in water, which plays a significant role in aquatic ecosystems and has direct implications to drinking water treatment, including the potential for formation of disinfection byproducts.
turbidity	A measure of the cloudiness of water caused by the presence of suspended matter. Turbidity in natural waters may be composed of organic and/or inorganic constituents, and has direct implications to drinking water treatment.
viewshed	An area of land, water, and other environmental elements that is visible from a fixed vantage point. Viewshed is typically evaluated both from a roadway and conversely of a roadway as viewed from the adjacent area.

waters of the U.S.	As defined in the Clean Water Act Section 404, waters of the U.S. applies only to surface waters, rivers, lakes, estuaries, coastal waters, and wetlands. Not all surface waters are legally waters of the U.S. Generally, waters of the U.S. include interstate waters and tributaries, intrastate waters and tributaries used in interstate and/or foreign commerce, territorial seas at the cyclical high-tide mark, and wetlands adjacent to the above.
watershed	A region or area that ultimately drains to a particular watercourse or body of water.
wetland	A zone that is periodically or continuously submerged or has high soil moisture, has aquatic and/or riparian vegetation components, and is maintained by water supplies significantly in excess of those otherwise available through local precipitation.
Williamson Act	The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use for 10 years. In return, landowners receive property tax assessments that are based on farming and open space uses as opposed to full market value.