CHAPTER 13
GLOSSARY

Acute toxicity	A biologically hazardous effect marked by sudden severe onset following exposure.
Advisory Council on Historic Preservation (ACHP)	A 19-member body appointed, in part, by the President of the United States to advise the President and Congress and to coordinate the actions of federal agencies on matters relating to historic preservation, to comment on the effects of such actions on historic and archaeological resources, and to perform other duties as required by law (Public Law 89-655; 16 USC 470).
Alluvial soil	Soil developed on clay, silt, sand, and gravel sediments deposited by running water.
Ambient air quality standards	Standards established on state or federal level that define the limits for airborne concentrations of designated criteria pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, lead, particulate matter) to protect public health with an adequate margin of safety (primary standards) and public welfare, including plant and animal life, visibility, and materials (secondary standards).
American Indian Religious Freedom Act (AIRFA)	AIRFA establishes as US policy the protection of the rights of American Indians to practice their traditional religions, including "access to sites, possession of sacred objects, and freedom to worship through ceremonies and traditional rites" (42 USC 1996).
Anaerobic	Living, active, or occurring in the absence of oxygen.
Anoxic zone	An area without oxygen.
Apportionment	An amount of water to which one is legally entitled.
Aquifer	A porous geologic unit capable of yielding significant quantities of water to a well.
Archaeological site	Any location where humans have altered the terrain or discarded artifacts. The location of past cultural activity; a defined space with more or less continuous archaeological evidence.
Archaeology	A scientific approach to the study of human ecology, cultural history, and cultural process, emphasizing systematic interpretation of material remains.

Artesian groundwater system	Water under pressure in a confined aquifer, such that the water will rise above the elevation of the confining layer in a well.
Attainment area	An area that meets the National Ambient Air Quality Standards for a criteria pollutant under the Clean Air Act or that meets state air quality standards.
Benthic	Benthic habitats and organisms occur or are located at the bottom of water bodies.
Bioaccumulation	The increasing concentration of a compound in the tissues of organisms as the compound passes along a food chain, resulting from the accumulation of the compound at each trophic level prior to its consumption by organisms at the next trophic level.
Bioenergetics	The biology of energy transformations and energy exchanges within and between living organisms and their environments.
Brackish	Saline water with a salt concentration between freshwater and seawater.
Carcinogen	A substance that induces cancer in living tissue.
Channelize	To confine a waterway to a clearly defined bed, usually significantly narrower and often straighter than the previous route.
Chronic toxicity	A biologically hazardous effect that makes itself known over a long period of time following exposure.
Clean Air Act (CAA)	The CAA legislates that air quality standards set by federal, state, and county regulatory agencies establish maximum allowable emission rates and pollutant concentrations for sources of air pollution on federal and private property. Also regulated under this law is proper removal and safe disposal of asbestos from buildings other than schools.
Clean Air Act conformity	The requirement that federal agency actions in nonattainment or maintenance areas be consistent with the Clean Air Act and with federally enforceable air quality management plans.
Clean Water Act of 1972, 1987 (CWA)	The CWA is the major federal legislation for improving the nation's water resources. It provides for development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters. The act contains specific provisions for regulating ships' wastewater and for disposing of dredge spoils within navigable waters. Section 404 of the act regulates disposal into "Waters of the United States," including wetlands.
CNEL	Community Noise Equivalent Levels: a method of measuring noise levels by averaging noise levels measured over a 24-hour period, weighted for sensitive times such as nights and evenings.
Consumptive use	A use of water that does not result in the water returning to the waterway, such as irrigation water taken up by plants, water used in manufacturing processes, or water used household uses.
Council on Environmental Quality (CEQ)	Established by NEPA, the CEQ consists of three members appointed by the President. CEQ regulations (40 CFR 1500-1508, as of July 1, 1986) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements and timing and extent of public participation.

Criteria pollutants	The CAA required the EPA to set air quality standards for common and widespread pollutants after preparing criteria documents summarizing scientific knowledge on their health effects. Today there are standards for six criteria pollutants: sulfer dioxide, carbon monoxide, particulate matter less than 10 microns in diameter (PM_{10}), nitrogen dioxide, ozone, and lead.
Cultural resources	Prehistoric and historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or a community for scientific, traditional, religious, or any other reason. Native American resources are sites, areas, and materials important to Native Americans for religious or heritage reasons. Resources may include prehistoric sites and artifacts, contemporary sacred areas, traditional use areas (e.g., native plant habitat), and sources for materials used in the production of sacred objects and traditional implements.
de minimus levels	Amounts of pollutants that are below the legal minimum levels and therefore not subject to regulation.
Dispersion model	A mathematical description of the spread of air or water constituents.
Dissolved oxygen	Amount of oxygen held within water. Monitoring the amount of oxygen dissolved in water is one measure of water quality. The maximum amount of oxygen that can be dissolved in water varies with the temperature of the water and the pressure of the atmosphere.
Endangered species	A species that is threatened with extinction throughout all or a significant portion of its range.
Endangered Species Act (ESA)	An act of Congress of 1972; 16 U.S.C. 1531-1543. The act requires federal agencies to ensure that their actions do not jeopardize the existence of endangered or threatened species.
Enhanced Evaporation System (EES)	A method to reduce the salinity of the Salton Sea. Water is sprayed at a sufficient height for the water to evaporate and the salts to precipitate and collect in a catchment basin. The collected salts would be disposed of in a landfill.
Eutrophic	A condition in which a body of water is enriched with dissolved nutrients that stimulate the growth of aquatic plant life, usually resulting in the depletion of dissolved oxygen.
Evapotranspiration	Loss of water to the atmosphere from soil and vegetation by evaporation and transpiration.
Fault	A fracture or a zone of fractures within a rock formation along which vertical, horizontal, or transverse slippage has occurred.
Geology	The science that deals with earth; the materials, processes, environments, and history of the planet, including the rocks and their formation and structure.
Geothermal	Relating to or using the heat of the earth's interior.
Groundwater	Water present in porous geologic materials beneath Earth's surface.
Gyre	A large rotational current.

Hydrology	The science dealing with the study of water, including the properties, distribution, and circulation of water in natural systems.
Igneous rock	Rock formed by the solidification of magma, or lava.
Incinerator	A furnace for the destruction and/or breakdown of waste materials by burning.
Ionizing radiation	Radiation that causes the release of free electrons
KGRA	Known geothermal resource areas
Leach	The removal of soluble constituents from porous materials by percolating water.
Life cycle	The stages through which an organism passes during development from a fertilized egg to reproduction to death.
Liquefaction	Phenomenon in which a sudden increase in pressure, caused by an earthquake, causes loose, cohesionless, water-saturated soils or sediments to undergo temporary but complete loss of shear strength, such that the soil resembles a liquid.
Mean	The average value of items in a sample.
Metamorphic rock	Rock transformed by temperature and/or pressure.
Mouth brooder	Refers to a species in which the females carry the eggs and young fry in their mouths.
Mutagen	A substance which induces a change or mutation in the genetic material of a living organism.
National Environmental Policy Act (NEPA)	Public Law 91-190, passed by Congress in 1969, established a national policy designed to encourage consideration of the influence of human activities on the natural environment. NEPA also established the Council on Environmental Quality. NEPA procedures require that environmental information be made available to the public before decisions are made.
National Historic Preservation Act (NHPA)	The NHPA protects cultural resources. Section 106 of the act requires a federal agency to take into account the potential effect of a proposed action on properties listed on or eligible for listing on the National Register of Historic Places.
National Register of Historic Places (NRHP)	A register of districts, sites, buildings, structures, and objects important in American history, architecture, archaeology, and culture, maintained by the Secretary of the Interior under the authority of Section 2(b) of the Historic Sites Act of 1935 and Section 101(a)(1) of the National Historic Preservation Act of 1966, as amended.
Native American Graves Protection and Repatriation Act (NAGPRA)	NAGPRA defines the ownership and control of Native American human remains and associated funerary objects discovered or recovered from federal or tribal land.
Native Americans	Used in the collective sense to refer to individuals, bands, or tribes who trace their ancestry to indigenous populations of North America prior to Euro-American contacts.
Oxidation-reduction	A chemical reaction in which one or more electrons are transferred from one atom or molecule to another.

Passerines	Song birds
Pathogen	A specific causative agent (such as a bacterium or virus) of disease.
Percolation	The downward movement of water through soil.
Permeability	In geology, the ability of rock or soils to transmit a fluid.
Porter-Cologne Water Quality Control Act	California statute that established the State Water Resources Control Board to coordinate activities dealing with water rights, water pollution, and water quality.
Recharge	Replenishment of water to an aquifer.
Salinity	The concentration of salts in a liquid commonly measured in milligrams per liter (mg/L) or parts per thousand (ppt).
Seismic	Pertaining to any earth vibration, especially an earthquake.
Seismicity	Relative frequency and distribution of earthquakes.
Semi-volatile organics	Organic compounds with relatively low vapor pressure at room temperature and normal atmospheric conditions. Refers to a class of compounds that can be extracted under atmospheric conditions without loss from volatilization.
Soil reactivity	The acidity or alkalinity of a soil. Highly reactive soils may be incompatible with certain materials, such as steel tanks or concrete foundations.
Soluble	Ability to dissolve in a liquid.
Stakeholder	Individual, organization, or government agency that manages, owns, or depends upon resources that may be affected by a proposed project.
Standard deviation	A measure of the variability among items in a sample.
State Historic Preservation Officer (SHPO)	The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as liaison for implementing the National Historic Preservation Act.
Stochastic	Stochastic models depict processes that are influenced by factors with random values. For example, the salinity and elevation of the Salton Sea depends upon the quality and quantity of water inflows, which will vary over time. The water-budget accounting model predicts salinity and elevation resulting from the variable inflows by a random or probabilistic distribution. Stochastic models are typically used when the underlying mechanisms are not well known but appear to occur randomly. Many water resource problems require stochastic analysis because they are driven by meteorological events.
Stratification	Refers to a layered distribution. For example, depending upon the circulation patterns in the Salton Sea, inflows will form a layer of freshwater on top of more saline water.
Surface water	Water on earth's surface, as distinguished from water in the ground (groundwater).

Trophic levels	Energy stored by plants moves through the ecosystem as it is consumed and utilized at various levels in the food chain. The trophic levels are producer (plant), primary consumer (herbivore), secondary consumer (primary carnivore), and tertiary consumer (secondary carnivore).
Turbidity	A measure of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines. Turbidity measures the scattering effect that suspended solids have on light: the higher the intensity of scattered light, the higher the turbidity. Primary contributors to turbidity include clay, silt, finely divided organic and inorganic matter, soluble colored organic compounds, plankton, and microscopic organisms. In surface water, the clarity of a natural body of water is used routinely as an indicator of the condition and productivity of the aqueous system.
UN-designated biosphere	In 1968, the UNESCO Conference on the Conservation and Rational Use of the Biosphere held a meeting, which led to the launch of the Man and the Biosphere (MAB) Program. The Biosphere Reserve concept was a key component for achieving MAB's objective to strike a balance between the apparently conflicting goals of conserving biodiversity, promoting economic and social development and maintaining associated cultural values. Biosphere Reserves were conceived as sites where this objective was to be tested, refined, demonstrated and implemented. The northern portion of the Gulf of California has been designated as one of these biosphere reserves.
US Environmental Protection Agency (EPA)	The independent federal agency established in 1970 to regulate federal environmental matters and to oversee the implementation of federal environmental laws.
Vector	An organism (such as an insect) that transmits a pathogen.
Water entitlement	The legal right to water.