Glossary

abiotic: Non-living.

accretion: An increase of land along the shores of a body of water, as by deposition of wind or water carried materials.

accumulator: A plant, such as pickleweed, that has adapted to living in a saline environment by isolating and storing salt inside special cells that eventually break off.

adaptive management: A management approach designed from the outset to "learn by doing," and to actively test hypotheses and adjust treatments as new information becomes available, thus it is a continuous process. Adjustment of decisions based on past and present knowledge. Adaptive management applies scientific principles and methods to improve management decisions incrementally.

aerobic: Living or occurring only in the presence of oxygen.

anaerobic: Lacking oxygen; able to live in the absence of oxygen.

anoxic: Containing no oxygen.

aquifer: An underground geological formation or group of formations that contain water, a source of ground water for wells and springs.

atlatls: Spears used by the San Dieguito culture which were fashioned by tying flaked stone to shafts.

autotroph: The primary producers of the ecosystem; photosynthetic plants and algae.

ayuntamiento: Spanish word meaning a town council.

bandito: A bandit.

barycenter: Center of the earth's mass.

beleaguer: To tease or annoy persistently; besiege, surround so as to force to give up.

biomass: Total weight of plants or organisms per unit area.

biota: The plant and animal life of a region.

biotic: Living.

Californio: Mexican Citizens, born in California.

catchment area: Another name for drainage basin, the area from which water is collected by a river and its tributaries.

centrifugal force: The apparent force in a rotating system that deflects masses radially outward from the axis of rotation; a force that pushes a rotating object away from the center of its rotation.

chaparral: the dense, drought-tolerant, evergreen habitat native to areas of California with a "Mediterranean" climate; genrally consisting of scrub oak (*Quercus dumosa*), manzanita (*Arctostaphylos spp.*), and chamise (*Adenostoma fasciculatum*). Chaparral is a "fire-dependent" system, and regenerates itself through periodic burnings.

chemotroph: An organism that obtains energy through chemical reactions involving inorganic compounds instead of light.

coastal sage scrub: a habitat similar to chaparral in terms of appearance, but generally lower-lying bushes and closer to the ocean;

dominated by sagebrush (*Artemesia californica*) and buckwheat (*Eriogonum fasciculatum*).

colonia: Spanish word meaning neighborhood.

colonized: To become established in a habitat.

consumer: An organism that obtains vital nutrients and energy by eating other organisms (living or dead); in the food chain, all organisms other than green plants.

continental shelf: An area of relatively shallow seabed which lies between the shore of a continent and the deeper water of the ocean.

detritivore: An organism that feeds on detritus.

detritus: Fragments of decomposing plants and animals.

dike: An embankment to confine or control water, often built along the banks of a river to prevent overflow of lowlands; a levee, groin, spur, jetty, deflector, or boom.

diseño: A hand drawn map.

drainage basin: A watershed or the area from which water is collected by a river and its tributaries.

drainage divide: The highest point(s) or the top of a watershed.

ebb tide: An outgoing tide (from the time of high tide to low tide).

ecology: The study of the interrelationships between organisms and their environment.

ecosystem: A distinct, self-supporting unit of interacting organisms and their environment.

environmental gradient: A gradual transition in physical conditions along some distance in space.

estuary: Is a region where fresh water from a river mixes with salt water from the sea.

euryhaline: Having a wide tolerance to salinity variations in the exterior environment.

evapo-transpiration: The total water loss from the soil, including that by direct evaporation, and that by transpiration from the surfaces of plants.

excreter: A plant, such as cordgrass, that has adapted to living in a saline environment by pushing out salty water through special glands onto its leaves in a process similar to perspiration.

ex-neophytes: Christianized mission Indians.

exotic species: A non-native species; a plant or animal species that was introduced into an area or region where it was not previously found.

generalist: Organism which can survive under a wide variety of conditions, and does not specialize to live under any particular set of circumstances.

geographic information systems (GIS): A computerized system for combining, displaying, and analyzing geographic data. GIS allows the building of map layers for anything that can be linked to a geographic coordinate system (i.e. has a latitude and longitude).

geomorphic process: The process that shapes or transforms the Earth.

gravity: The physical force which attracts all particles to the Earth, thus giving them weight.

groundwater: Water that accumulates under the ground.

groundwater table: Level below the earth's surface at which the ground becomes saturated with water.

halcyon: Idyllically calm and peaceful; suggesting happy tranquility.

halophyte: A plant that can grow in salty or alkaline soil.

heterotroph: Consumers, an organism that obtains energy by ingesting organic substances.

historic archaeology: Archaeology that investigates what happened during historic periods (after writing was invented).

hypersaline: Extremely salty water or condition.

hypertonic: Having a higher osmotic pressure than a surrounding fluid or medium.

hypotonic: Having a lower osmotic pressure than a surrounding fluid or medium.

infiltration: Water that sinks into the soil.

integrated pest management: Form of pest management that uses a combination of biological, mechanical, and chemical methods to control pests with a goal to minimize any damage that may occur to the environment.

intertidal channels: Channels of water in an estuary whose water level rises during high tides and falls during low tides.

isotonic: Having an osmotic pressure equal to that of the surrounding fluid or medium. Having the same salinity as body fluids.

league: An obsolete unit of distance, primarily nautical, of variable length (approximately three miles).

limestone: A type of sedimentary rock made up of calcium carbonate that was deposited by the remains of marine animals.

littoral drift: The movement of beach material in the littoral zone (the area from the shoreline to just beyond the breaker zone) by waves and currents.

mano: A hand-held stone, often granitic, used with a metate to grind seeds and acorns.

maritime succulent scrub: coastal bluff areas containing sage scrub habitat which include many succulent and cacti species.

metate: A stone slab used as a base upon which seeds and acorns were ground with a *mano*.

microclimates: The local climate of a given site or habitat or even a tiny crevice.

mosaic: Art consisting of a design made of small pieces of colored stone or glass.
mudflat: a tract of low muddy land near an estuary; covered at high tide and exposed at low tide.

native species: Plants or animals that naturally occur in a specific area or region; indigenous, not introduced.

neap tide: A tide of lowest range; occurs at the first and third quarters of the moon.

neophytes: Mission Indians who were not yet Christianized.

non-native species: An exotic species; a plant or animal species that was introduced into an area or region where it was not previously found.

osmoconformer: An animal that does not actively adjust its internal salinity because it is isotonic with its environment.

osmoregulator: An animal whose body fluids have different salinity than the environment, and that must either discharge excess water if it lives in a hypotonic environment or take in water if it inhabits a hypertonic environment.

osmosis: The diffusion of a fluid through a semi-permeable membrane until it is of equal concentration on both sides.

osmotic: Of or relating to osmosis.

oxidize: To combine with oxygen.

pangaea: The supercontinent formed near the end of the Paleozic era (over 200 million years ago) when plate movements brought all the land masses on Earth together.

phytoplankton: Microscopic, floating producers (such as diatoms and dinoflagelletes).

prehistoric archaeology: Archaeology that investigates physical clues to evaluate what happened before the development of written records.

primary documents: Records written by the actual historical people about their life and times.

producer: An organism that produces its own food from elements in its environment; mostly photosynthetic organisms that use light energy to synthesize sugars and other organic compounds, which they then use as fuel for cellular respiration and as building material for growth.

productivity: The transfer of energy and nutrients into living matter over time. Productivity is a function of both the growth rate and biomass of an organism and is expressed as a rate of change.

pueblo: A town.

refracted: Dispersion of light.

refractometer: Device for measuring the salinity of water.

restoration ecology: The science concerned with efforts to direct the recovery of damaged sites and landscapes.

salinity gradient: A change in salinity between bodies of water or layers within a body of water.

salt marsh: A type of coastal wetland (estuary) consisting of salt-tolerant grasses and other plants that are periodically exposed to salt water flooding.

salt water intrusion: The gradual replacement of freshwater by saltwater in coastal and inland areas. Salt water intrusion typically occurs when groundwater, which charges the aquifer, is withdrawn faster than it is replenished.

sand dune: A hill or ridge of sand piled up by the wind commonly found along shores, along some river valleys, and generally where there is dry surface sand during some part of the year.

secondary documents: Records written by someone about a previous time.

sediment: Particles, derived from rocks or biological materials, suspended in, or settled out of, a liquid.

siltation: The process by which sediment is carried by moving water and accumulates on the bottom of rivers, bays, etc.

slough: An inlet of water, such as a creek through a marsh or tide flat; a place of deep mud or mire.

spring tide: A tide having the greatest rise and fall, occurring at full and new moons.

sub-basin: A sub-section of a drainage basin.

surface runoff: Precipitation, snow melt, irrigation water, or wastewater in excess of what can infiltrate the soil surface that travels to the nearest surface water bodies; runoff is a major transporter of non-point source pollutants.

tectonic uplift: The upheaval or lifting up of the earth's crust (as in the process of mountain building).

tidal flushing: The circulation of tidal waters.

tidal prism: A volume of water exchanged between an estuary or a lagoon and the open sea during one tidal period. The volume of water that flows into a tidal channel and out again during a complete tide, excluding any upland discharges.

watershed: The region draining into a river, river system, or body of water.

wetland: A place where the land is soaked or submerged by water either all or part of the time (such as bogs, marshes, or swamps).

zooplankton: Floating, aquatic animals, usually microscopic.