



## Appendix J

### Glossary

**401 Certification:** Requirement of Section 401 of the federal Clean Water Act (CWA) that provides States must certify that any activity subject to a permit issued by a federal agency meets all state water quality standards.

**404 Permit:** Requirement of Section 404 of the CWA requires the US Army Corps of Engineers to have issued a permit before dredged or fill material are discharged into waters of the United States, including adjacent wetlands.

**Adaptive Management:** The development of a management strategy that anticipates likely challenges associated with mitigation projects and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of mitigation projects and guides modification of those projects to optimize performance.

**Biodiversity:** The number and variety of different organisms in the ecological complex in which they naturally occur (i.e., within a given species, ecosystem, biome, or the planet). It is a measure of the health of an ecosystem

**Biodiversity Hotspot:** A biogeographic region with a significant reservoir of biodiversity that is under threat from humans.

**Biotic Structure:** Describes the way organisms interact within an ecosystem.

**Buffer Zones:** An area adjoining a wetland, channel, or upland linkage or wildlife corridor that is in a natural or semi-natural state and not dedicated to anthropogenic uses that would severely detract from its ability to contain contaminants, discourage visitation into the habitat area by people and non-native predators, and/or protect the habitat area from stress and disturbance. For wetland and riparian systems, a buffer is to maintain or improve water quality by trapping and removing various non-point source pollutants from both overland and shallow subsurface flows, provide erosion control, provide water temperature control, reduce flood peaks, serve as groundwater recharge points, etc. Buffer zones occur in a variety of forms, including herbaceous or grassy buffers, grassed waterways, or forested riparian buffer strips.

**California Floristic Province:** A floristic province with a Mediterranean climate located on the Pacific Coast of North America with a distinctive flora that bears similarities to floras found in other regions experiencing hot, dry summers and cool, wet winters. One of the biodiversity hotspots in the world as defined by Conservation International due to an unusually high



concentration of endemic plants (approximately 3,400 of the 8,000 species found in the province) and to having lost over 70 percent of its native vegetation.

**Climate Change:** Climate change refers to the buildup of man-made gases in the atmosphere that trap the sun's heat, causing changes in weather patterns on a global scale. The effects include changes in rainfall patterns, sea level rise, potential droughts, habitat loss, and heat stress.

**Channel or Drainage:** An open conduit either naturally or artificially created which periodically or continuously contains moving water or which forms a connecting link between two bodies of standing water.

**Community Park:** Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than regional parks.

**Condition:** The relative ability of a resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to those in the region.

**Connectivity:** The state of being functionally linked by movement of organisms (i.e., to feed, move, reproduce, rest, winter, etc.), materials, or energy.

**Conservation:** The use, protection, and improvement of natural resources according to principles that will ensure their highest economic or social benefits.

**Conservation Easement:** An easement restricting a landowner to land uses that are compatible with long-term conservation and environmental values.

**Critical Habitat:** A specific geographic area(s) designated by the US Fish and Wildlife Service that contains features essential for the conservation of a threatened or endangered species and may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery

**Dredge & Fill Material:** "Dredge" is material that is excavated or dredged from waters of the United States. "Fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. The term "fill material" does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the CWA.

**Ecological:** Relating to the interrelationships of organisms and their environment.



**Ecosystem:** The interacting synergism of all living organisms in a particular environment; every plant, insect, aquatic animal, bird, or land species that forms a complex web of interdependency.

**Ecosystem Services:** Ecosystem services provide one approach for framing the values and benefits of open space. The Millennium Ecosystems Assessment (2005) has presented a scheme for classifying ecosystem services using four general categories: provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling.

**Environmental Education:** Focuses on environmental “literacy” and on using the environment to engage students in their education through “real-world” learning experiences, with the goals of helping them achieve an understanding of and appreciation for the environment, caring for the total environment, understanding how humans interact with and are dependent on natural ecosystems, and developing critical-thinking skills to resolve environmental issues.

**Ephemeral Stream:** An ephemeral stream has flowing water only during and for a short duration after precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream; runoff from rainfall is the primary source of water for stream flow.

**Establishment:** The manipulation of the physical, chemical, or biological characteristics present to develop an resource that did not previously exist at a site. Establishment results in a gain in resource area and functions.

**Estuarine:** Tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land.

**Floristic Resource Value:** An assessment of the richness or diversity of native plant community, a measure of habitat integrity.

**Freshwater Wetlands:** Non-saline lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. NWI categories considered freshwater wetlands include freshwater emergent wetland, freshwater forested/shrub wetland, freshwater pond and lake.

**Functional capacity:** The degree to which a resource area performs a specific function.

**Functions:** The physical, chemical, and biological processes that occur in ecosystems.

**Impact:** Adverse effect.



**Geomorphic Provinces:** Naturally defined geologic regions that display a distinct landscape or landform.

**Greenway:** A linear area maintained as open space in order to conserve natural and cultural resources and to provide recreational opportunities, aesthetic and design benefits, and linkages. More specifically, a coordinated system of open space that links existing facilities using streets, railroad rights-of-way, utility easements, and natural features such as stream corridors and drainage channels.

**Ground Water Management:** The planned and coordinated management of a groundwater basin or portion of a groundwater basin with a goal of long-term sustainability of the resource.

**Groundwater:** Water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation in which it is situated.

**Habitat Connectivity:** The degree to which the landscape facilitates animal movement and other ecological flows.

**Habitat Conservation:** A land management practice that seeks to conserve, protect and restore habitat areas for native plants and animals, especially conservation reliant species, and prevent their extinction, fragmentation of their habitat, or reduction in range.

**Habitat Conservation (Plans):** A plan prepared under Section 10(a)(1)(B) of the federal Endangered Species Act to provide for the lawful take of a listed wildlife species by conserving the ecosystems upon which the listed species depend, ultimately contributing to their recovery.

**Habitat Enhancement:** The manipulation of the physical, chemical, or biological characteristics of a community or ecosystem to heighten, intensify, or improve a specific resource function(s). Enhancement results in the gain of the selected resource function(s), but may also lead to a decline in others.

**Headwater:** The upper watershed area where streams generally begin; typically consists of 1st- and 2nd-order streams.

**Hydrological:** The distribution and cycle of surface and underground water.

**Hydrology:** A science related to the occurrence and distribution of natural water on the earth including the annual volume and the monthly timing of runoff.

**Intermittent Stream:** A stream that has flowing water only during certain times of the year, when groundwater provides water for stream flow. During dry periods, flowing water may not be present. Runoff from rainfall is a supplemental source of water for stream flow.



**Lacustrine System:** Wetlands and deepwater habitats that are situated in a topographic depression or a dammed river channel.

**Landscape Linkage:** Large, regional connections between habitat blocks (“core areas”) meant to facilitate animal movement and other essential flows between different sections of a landscape (taken from Soulé and Terborgh 1999). These linkages are not necessarily constricted, but are essential to maintain connectivity function in the ecoregion.

**Mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of natural resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization measures for a project has been achieved.

**Mitigation Banking:** Created when a government agency, corporation, nonprofit organization, or other entity undertakes providing mitigation for itself or others under a formal agreement with a resource or regulatory agency. Mitigation banks are a form of "third-party" compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by the bank operator rather than by the project developer. The bank operator is responsible for the design, construction, monitoring, ecological success, and long-term protection of the bank site.

**Multiple Use Area:** A land management area where several environmental, recreational, economic, historical, cultural and/or social values are located in the same geographic area in a compatible and sustainable manner.

**Multiple-Use (Multi-Use) Trail:** A trail that permits more than one user group at a time (e.g., horse, hiker, mountain bicyclist, etc.).

**National Trails System:** A network of trails (National Scenic, Historic, or Recreation) throughout the country authorized by the National Trails System Act (16 U.S.C. 1241-51).

**Neighborhood Park:** City- or County-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park.

**Open Space:** Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

**Outdoor Recreation:** Leisure activities involving the enjoyment and use of natural resources primarily outside of structures.



**Palustrine System:** A nontidal wetland dominated by trees, shrubs, persistent emergents, emergent mosses or lichens.

**Park:** Any area that is predominately open space with natural vegetation and landscaping used principally for active or passive recreation.

**Perennial Stream/Pond/Lake:** A river, stream or lake that has continuous surface flows in parts of its bed all year round during years of normal rainfall.

**Perennial Yield:** The maximum quantity of water that can be annually withdrawn from a groundwater basin over a long period of time (during which water supply conditions approximate average conditions) without developing an overdraft condition.

**Point-Source Discharge:** Any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container

**Pollution (of water):** The alteration of the physical, chemical, or biological properties of water by the introduction of any substance into water that adversely affects any beneficial use of water.

**Preservation:** The removal of a threat to, or preventing the decline of, a resource by an action in or near those resources. The term includes activities commonly associated with the protection and maintenance of resources through the implementation of appropriate legal and physical mechanisms such as acquisition, placement of a deed restriction or conservation easement, etc. Preservation does not result in a gain of resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to the former resource or community. Re-establishment results in rebuilding a former resource and results in a gain in that type of resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded natural resource. Rehabilitation results in a gain in resource function, but does not result in a gain in area.

**Recreation:** The refreshment of body and mind through forms of play, amusement, or relaxation; usually considered any type of conscious enjoyment that occurs during leisure time.

**Recreation, Active:** A type of recreation or activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts, and various forms of children's play equipment.





**Recreation, Passive:** Type of recreation or activity that does not require the use of organized play areas.

**Regional Park:** A park typically 150 to 500 acres in size focusing on activities and natural features not included in most other types of parks and often based on a specific scenic or recreational opportunity.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded resource. Restoration is divided into two categories: re-establishment and rehabilitation.

**Riparian:** Lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality.

**Riparian (Riverine) Wetlands:** The wetlands associated with rivers and streams, including upper and lower riverine habitats and dry washes.

**Riverine Systems:** All waters, wetlands, and other plant communities living within a river or stream, including the adjacent wetland and riparian areas along their banks. Man-made habitats considered part of a riverine system include concrete-lined channels and soft-bottomed channels.

**Riverine Wetland:** Riverine wetlands include wetlands and deepwater habitats contained within a channel, except those areas dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens.

**School District Lands:** Properties owned by public school districts and used for environmental, recreational, and administrative purposes.

**Stakeholder:** Individuals or groups who can affect or be affected by an organization's activities; or individuals or groups with an interest or "stake" in what happens as a result of any decision or action. Stakeholders do not necessarily use the products or receive the services of a program.

**Storm Water Quantity:** Storm water (runoff) – Water which is originated during a precipitation event which may collect and concentrate diffused pollutants and carry them to water courses causing degradation. Runoff in the urban environment, both storm-generated and dry weather flows, has been shown to be a significant source of pollutants to the surface waters of the nation. In California, the authority to regulate urban and storm water runoff under the NPDES system has been delegated by EPA to the State Water Resources Control Board and the nine Regional Water Quality Control Boards. See Volume 2, Chapter 19 Urban Runoff Management RMS.

**Streambed Alteration Agreement - Section 1600:** Regulates activities that would alter the flow, bed, banks, channel, or associated riparian areas of a river, stream, or lake. The law



requires any person, state, local governmental agency or public utility to notify CDFG before beginning an activity that will substantially modify a river, stream, or lake. These activities also must be consistent with any other applicable environmental laws such as Section 404 and 401 of the Clean Water Act and CEQA.

**Surface Water:** As defined under the California Surface Water Treatment Rule, CCR, Title 22, Section 64651.83, means “all water open to the atmosphere and subject to surface runoff...” and hence would include all lakes, rivers, streams and other water bodies. Surface water thus includes all groundwater sources that are deemed to be under the influence of surface water (i.e., springs, shallow wells, wells close to rivers), which must comply with the same level of treatment as surface water.

**Tidal Wetlands:** Wetland habitats that are inundated by tides, either seasonally or year-round. Marine harbors, a man-made habitat, are also considered tidal wetlands. In the National Wetland Inventory (NWI) mapping system, the three categories included in tidal wetlands are estuarine and marine deepwater, estuarine and marine wetland, and tidal wetlands.

**Transverse Ranges:** An east-west trending series of steep mountain ranges and valleys. The east west structure of the Transverse Ranges is oblique to the normal northwest trend of coastal California, hence the name "Transverse." The province extends offshore to include San Miguel, Santa Rosa, and Santa Cruz islands. Its eastern extension, the San Bernardino Mountains, has been displaced to the south along the San Andreas Fault.

**Uplands:** An area of the terrestrial environment that does not have direct interaction with surface waters.

**Water Quality:** Description of the chemical, physical, and biological characteristics of water, usually in regard to its suitability for a particular purpose or use.

**Water Quality Standards:** A law or regulation that consists of the beneficial designated use or uses of a water body or a segment of a water body and the water quality criteria that is necessary to protect the use or uses of that particular water body. Water quality standards also contain an anti-degradation policy. The water quality standard serves a twofold purpose: (a) it establishes the water quality goals for a specific water body and (b) it is the basis for establishing water quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Clean Water Act, as amended by the Water Quality Act of 1987.

**Watershed:** A land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.





**Watershed Approach:** An analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs.

**Wetlands:** Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

**Wildlife Linkages:** A wide area of native vegetation that connects or has the potential to connect two or more large patches of habitat on a landscape or regional scale through which a species will likely move over time. The move may be multi-generational; therefore, a linkage should provide both wildlife connectivity and biological diversity. A Wildlife Linkage should be a minimum of 1,000 feet in width, be vegetated with native vegetation, and have little or no human intrusion.