

9.0 DEFINITIONS

100,000 Square Foot Commercial Development. Any commercial development that creates at least 100,000 square feet of impermeable area, including parking areas.

Adaptive Management. A process in which projects are implemented within a framework of scientifically driven experiments to test predictions and assumptions. The analysis of the outcome of project implementation helps managers determine whether current management should continue as is or whether it should be modified to achieve desired conditions.

Adverse Modification. The threshold when a proposed action will adversely affect designated critical habitat's constituent elements or their management in a manner that will appreciably diminish or preclude the role of that habitat in the survival or recovery of the species.

Agricultural Lands. Lands used for crop production, animal production, forage production, and grazing activities employing usual and customary agricultural practices for the region.

Alluvial Fan. A fan-shaped area of alluvium deposited by a river when reaching flatter land.

Alluvium. Sediment deposited by running water, especially the type of soil formed in river valleys and deltas from material washed down by the river.

Anadromous. A life history pattern for some species of fish (salmon, steelhead, some lampreys) in which they spawn in fresh water and the offspring migrate to a bay, sea, or ocean to mature.

Appreciably Diminish. To considerably reduce the capability of designated or proposed critical habitat to satisfy requirements essential to both the survival or recovery of a listed species.

Automotive Repair Shop. A facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Baseline Conditions. A standard by which things are measured or compared. Typically, the baseline is considered to be the conditions at the current time or when a project or assessment is initiated.

Basin. A natural depression in the surface of the land. Also a hydrologic unit consisting of a part of the surface of the earth covered by a drainage system consisting of a surface stream or body of impounded surface water plus all tributaries.

Best Management Practice (BMP). A program, technology, process, siting criteria, operational methods or measures, or engineered systems, which when implemented prevent, control, remove, or reduce pollution.

Biodiversity. Biological diversity, simply stated, is the diversity of life. As defined in the proposed US Congressional Biodiversity Act, HR1268 (1990), "*biological diversity means the full range of variety and variability within and among living organisms and the ecological complexes in which they occur, and encompasses ecosystem or community diversity, species diversity, and genetic diversity.*" Typical measurements of biodiversity such as those used by The California Department of Fish and Game (2003) when analyzing the Biodiversity of California include:

Richness – a measure of diversity – is usually referred to as species richness and is the number of species of a particular taxon (or all taxa) in an area. Richness can also mean the number of vegetation types in an area.

Rarity – a measure of sensitivity – is used for those taxa that have special status due to very limited distribution, low population levels, or immediate threat such as habitat conversion. An area high in rarity has many taxa that meet this definition.

Endemism – a measure of natural distribution – is used for those taxa that are found only in one specific area, such as a region or state. A region with high endemism has many taxa restricted to it.

Biological Opinion. A written statement provided to a Federal Agency and an applicant, if any, pursuant to Section 7(b)(3)(A) of the Federal Endangered Species Act setting forth the Secretary of the Interior's opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the listed species or its critical habitat. If jeopardy or adverse modification is found, the biological opinion shall suggest reasonable and prudent alternatives which the secretary believes would not violate subsection 7(a)(2) and can be taken by the Federal agency or applicant in implementing the agency action.

Bio-swale. A constructed swale vegetated with upland grass or wetland herbaceous plants used for filtering run-off.

Brackish Marsh. A brackish marsh consists of plant species adapted to brackish water conditions in which the concentration of salt has been diluted by fresh water.

Categorical Exemption. An exemption from CEQA for a class of projects based on a finding by the Secretary of Resources that the class of projects does not have a significant effect on the environment.

CEQA. "CEQA" means the California Environmental Quality Act, California Public Resources Code sections 21000 et seq. A State law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project. General Plans require the preparation of a "program EIR."

CESA. "CESA" means the California Endangered Species Act, Fish and Game Code, Sections 2050 et seq.

Changed Circumstance. Changes that can reasonably be anticipated and planned for (e.g., the listing of new species, modifications in the project or activity as described in the original HCP).

Commercial Development. Any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Conservation. The terms “conserve,” “conserving” and “conservation” mean to use and the use of all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the regulatory measures provided pursuant to the federal and state Endangered Species acts are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law endorsement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking. [ESA §3(3)]

Conservation measures. Conservation measures are actions to benefit or promote the recovery of listed species and serve to minimize or compensate for, project effects on the species under review.

Constituent elements. Physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographic and ecological distributions of a species.

Corridor. A physical linkage, connecting two or more areas of habitat that are used on a daily or seasonal basis by animals to get from one area to the other.

Creation. The construction or establishment of a habitat or plant community within an area of a different habitat or plant community.

Critical habitat. For listed species consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. Designated critical habitats are described in 50 CFR §17 and 226.

Development. Defined as the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials on land, in or under water, change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the

Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). As used in this definition, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, communication tower/facility, reservoir, pump station, and electrical power transmission and distribution line.

Diked Marsh. A diked marsh is a marsh in which regular inundation due to tidal action has been excluded due to the presence of a berm or dike.

Directly Connected Impervious Area (DCIA). The area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across a permeable area such as lawns or bio-swailes, etc.

Discretionary Project. A project which requires the exercise of judgement or deliberation when the public agency or public body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Ecotone. A habitat created by the juxtaposition of distinctly different habitats; an edge habitat; or an ecological zone or boundary where two or more ecosystems meet.

EIR/EIS. Environmental Impact Report/Environmental Impact Statement, a joint public information document for making informed decisions on a project prepared pursuant to California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), respectively.

Endangered species. Any species which is in danger of extinction throughout all or a significant portion of its range.

Endemic. Having a natural distribution confined to a specific geographical area or region.

Enhancement. Enhancement is the increase in biological values of a particular area or feature, vegetation, etc. The modification of specific structural features of an existing habitat to increase one or more functions based on management objectives. Enhancement may also be the alteration of a site to produce conditions that did not previously exist in order to accentuate one or more values of a site.

Ephemeral Stream. Ephemeral streams or watercourses flow only in response to precipitation. Flow ceases a few days or weeks after the rain ceases. Ephemeral streams typically do not support riparian vegetation.

ESA. Federal Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq. **Section 7** of the ESA outlines the procedures for Federal interagency cooperation to conserve Federally-listed species

and designated critical habitats. Section 7(a)(2) requires that each Federal agency shall, in cooperation with the Secretary of the Interior or Commerce, as appropriate, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. **Section 10** of the ESA establishes the procedures for the incidental take of listed species by non-Federal entities.

Estuarine Habitat. Estuaries are located in areas where fresh and salt water mix such as in bays, deltas, lagoons, and the mouths of rivers. Estuaries are usually diverse environments.

Eutrophication. A process of aging of lakes and ponds in which the nutrient content builds up and supports algal growth. The algae use up oxygen in the evenings and when they die and decompose. The low oxygen content of these lakes and ponds results in a low diversity. Nitrate fertilizers in agricultural run-off and nutrients from animal wastes and human sewage hasten eutrophication.

Exotic Species. Plants, animals, or microorganisms which are introduced by humans into areas where they are not indigenous. Exotics are often associated with negative ecological consequences for native species and the ecosystems.

Extirpated. Extinct or no longer existing in a specific geographic location or region.

Food Web. A food web represents the complex relationships between a variety of organisms in which energy and nutrients are transferred from one species to another. The food web consists of a number of food chains and the members of the food web often belong to more than one food chain thus resulting in the transfer of energy and nutrients among the food chains as well as within the food chains of a food web.

Forest. A landscape that supports a continuous overstory of tree cover in which the canopies largely overlap.

Fossorial. Having the habit of digging. The term is applied to those animals which excavate burrows or nest holes in the ground, such as the California ground squirrel, pocket gopher, and badger.

General Plan. A compendium of city or county policies regarding its long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council or Board of Supervisors. In California, the General Plan has 7 mandatory elements (Circulation, Conservation, Housing, Land Use, Noise, Open Space, Safety and Seismic Safety) and may include any number of optional elements (such as Air Quality, Economic Development, Hazardous Waste, and Parks and Recreation). The General Plan may also be called a "City Plan," "Comprehensive Plan," or "Master Plan."

HCP. Habitat Conservation Plan, under section 10(a)(2)(A) of the Act, a planning document that is a mandatory component of an incidental take permit application, also known as a Conservation Plan.

Hillside. Property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is twenty-five percent or greater.

In-fill Development. Development occurring in an area already surrounded by existing development on at least three sides.

Incidental Take. As defined by ESA, “*incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.*” take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity.

Infiltration. The downward movement of water into the soil.

Intermittent Stream. There are two types of intermittent streams; spatially and temporally intermittent, and these often occur along the same watercourse. Spatially intermittent streams have water that appears above the streambed in certain reaches whereas in other reaches, the water remains below the streambed. Temporally intermittent streams often flow for at least several months of the year. The source of much of this water is from the water table that rises above the surface of the streambed after being recharged by rainfall or snowmelt.

Intermittent and ephemeral streams are often confused with one another. The critical difference is the connection that intermittent streams have with the groundwater table. Vegetation growing along intermittent streams often has access to the water table or at least a greater quantity of soil moisture due to the proximity of the water table. This creates distinct hydrologic characteristics and vegetational differences that distinguish intermittent streams from ephemeral streams.

Intertidal. The area of shore or bank that lies between the high and low tides.

Jeopardy. Jeopardize the continued existence of - to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. [50 CFR §402.02]

Lacustrine. Refers to freshwater bodies often greater than 20 acres in size and often refers to the shore of a lake.

Lead Agency. Lead agency (*e.g.* city, county, government agency) is the public agency which has the principal responsibility for carrying out or approving a project. Lead agencies are responsible for completing the environmental review process as required by CEQA.

Linkage. Habitat linkages provide a connection between two or more habitat areas. Habitat linkages are used on a relatively infrequent basis (as compared to corridors) but are very important for dispersal of wildlife and movement of individual plants and animals to maintain populations throughout an area. Habitat linkages are also important for maintaining gene flow among the different portions of a population.

Listed Species. A species, subspecies, or distinct vertebrate population segment that has been added to the Federal lists of Endangered and Threatened Wildlife and Plants as they appear in sections 17.11 and 17.12 of Title 50 of the Code of Federal Regulations (50 CFR 17.11 and 17.12).

Managed Marsh. A managed marsh is subjected to an artificial water regime designed to benefit a particular species.

Maximum Extent Practicable. The term “maximum extent practicable,” or MEP, is embodied as the basic performance standard in numerous state and federal regulations, including the Federal Endangered Species Act and Section 401 of the Federal Clean Water Act. The MEP standard does not necessarily involve the same criteria in each application; it is intended to address projects or actions on an individual basis considering each of their specific circumstances and purpose. For the purposes of the Solano HCP/NCCP, the working definition for “maximum extent practicable” combines the primary elements from the EPA’s 404(b)(1) Guidelines for assessing the feasibility of alternatives to minimizing impacts to aquatic resources and USFWS’s HCP Handbook for evaluating the maximum conservation program that can be reasonably required of an HCP applicant. Under the EPA guidelines, practicable is defined as:

“available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes (40 CFR 230.10(a)(2)).”

The USFWS HCP Handbook (Section 7-3) states that a conservation program may be evaluated against the MEP standard by:

“weighing the benefits and costs of implementing additional mitigation, the amount of mitigation provided by other applicants in similar situations, and the abilities of that particular applicant.”

Under this working definition, the following provides examples of criteria that can be applied in considering the MEP standard:

- The effects of seasonal restrictions on operation and maintenance activities of irrigation facilities for non-emergency situations. Actions that would significantly disrupt the supply of irrigation water during the irrigation season to water contractors or that would cause significant degradation of water quality would be considered impracticable (not consistent with the overall project purpose).
- The economic costs for compliance with conservation measures. Conservation actions that add significant additional costs such that a project would not be financially feasible would be considered impracticable (not consistent with the cost criterion).
- The effects of the costs of conservation measures on the ability for projects to be competitive in the market area. Conservation actions that increases the costs of residential, commercial, and business/industrial projects such that an applicant/community would be at a significant competitive disadvantage with other applicants in the County and regional market area for projects of a similar size and purpose would be considered impracticable (not consistent with the cost and applicants in similar situations criteria).
- The ability to fund conservation programs. Conservation actions that would place a financial burden on the applicants that has a significant negative impact on their annual General Fund budget would be considered impracticable (not consistent with the cost criterion and the logistics

criterion with respect to the difficulty of local agencies to increase taxes to cover additional expenses).

McAteer-Petris Act. The McAteer-Petris Act, enacted on September 17, 1965, established the San Francisco Bay Conservation and Development Commission as a temporary state agency charged with preparing a plan for the long-term use of the Bay (the Bay Plan). In August 1969, the McAteer-Petris Act was amended to make BCDC a permanent agency and to incorporate the policies of the Bay Plan into state law.

Member Agencies. Agencies within Solano County, includes cities, irrigation districts and special districts, purchasing water from the Solano Project for agricultural, municipal, and industrial purposes.

Mitigation. Avoiding or minimizing impacts of an action.

Mitigation Bank. Mitigation banking involves the preservation, restoration, creation, or enhancement of natural communities and species which will compensate for unavoidable losses at another site. Banking is designed to coordinate mitigation at one location for habitat losses allowed at other sites. Mitigation banking is used primarily when on-site mitigation can not be achieved or is not as environmentally beneficial. Generally, the majority of the habitats in mitigation banks are preserved, restored, or created prior to offsite impacts.

Municipal Separate Storm Sewer System (MS4). A publicly owned conveyance or system of conveyances that discharges to waters of the US and is designed or used for collecting or conveying stormwater, is not a combined sewer, and is not part of a publicly owned treatment works.

Natural Land. Natural land is land with a significant cover of natural vegetation. Natural vegetation in this context includes all native California natural communities and includes forestlands, shrublands, native and non-native grasslands, non-irrigated land, grazed land, and vacant or disturbed natural land. Natural land excludes lands subject to intensive agriculture and urban uses. Disturbed land or land recently cleared may still be restorable and should be considered as natural land.

Natural Vegetation. An association of plants that grow in an area in the absence of strong human influences. Natural vegetation includes grazed areas, but does not include disturbed or cultivated areas, or areas where the hydrology has been altered to a degree that a different association of plants grows in the altered area..

NCCP. Natural Community Conservation Planning Act, California Fish and Game Code, Section 2800-2835.

Nejedly-Bagley-Zberg Suisun Marsh Preservation Act. The Suisun Marsh Preservation Act of 1974 directed the Bay Conservation and Development Commission (BCDC) and the Department of Fish and Game to prepare a Suisun Marsh Protection Plan "to preserve the integrity and assure continued wildlife use" of the Suisun Marsh. In Decemeber 1976, BCDC submitted the Suisun Marsh Protection Plan to the Governor and the Legislature. The Suisun Marsh Preservation Act was amended in 1977 to incorporate the findings and policies contained in the plan into state law.

NEPA. National Environmental Policy Act, an act passed in 1974 establishing federal legislation for national environmental policy, a council on environmental quality, and the requirements for environmental impact statements

New Development. Land disturbing activities; structural development, including construction or installation of a building or structure and creation of impervious surfaces; and land subdivision are all considered new development.

Nonpoint Source Pollution. Pollution originating from diffuse areas (such as road run-off or air pollution from automobiles) and having no well-defined locational source.

Open Space Land. 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.

Parking Lot. A land area or facility for the temporary parking or storage of motor vehicles used personally, for business or for commerce with a lot size of 5,000 square feet or more, or with 25 or more parking spaces.

Palustrine Wetlands. Used in the wetlands classification system by the U.S. Fish and Wildlife Service (USFWS) to refer to nontidal wetlands that are vegetated by trees, shrubs, herbaceous plants, mosses, and/or lichens and all wetlands that occur in tidal areas where the salinity of ocean-derived salts is below 0.5 parts per thousand. Palustrine wetlands can also be non-vegetated if the following four characteristics are present: 1) area less than 8 ha (20 acres); 2) active wave-formed or bedrock shoreline features are lacking; 3) water depth in the deepest part of the basin is less than 2 meters at low water; and 4) salinity due to ocean-derived salts is below 0.5 parts per thousand.

Perennial Stream. Perennial streams have visible water flowing above the streambed year-round.

Permit Holders. Local Solano County government entities (includes cities, irrigation districts and special districts) currently participating the HCP/NCCP.

Point Source Pollution. Pollution that is discharged from a discrete location such as a pipe, tank, pit, ditch, or smokestack.

Practicable. Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes as defined under the Section 404(b)(1) guidelines for alternative analyses required for individual permits issued by the U.S. Army Corps of Engineers.

Preserve. An area where organisms or other features are protected.

Project. Any activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

Recovery. Improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the federal Endangered Species Act. [50 §CFR 402.02]

Recovery unit. Management subsets of the listed species that are created to establish recovery goals or carrying out management actions. To lessen confusion in the context of section 7 and other Endangered Species Act activities, a subset of an animal or plant species that needs to be identified for recovery management purposes will be called a “recovery unit” instead of a “population.”

Redevelopment. The creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to these SUSMP requirements, the design standards apply to only the addition, and not the entire development.

Reserve. An area or tract of land set apart or saved for future uses or specific purposes. Typically distinguished from preserves in that reserves typically involve significant restoration, rehabilitation, enhancement or other active management to create or improve conditions suitable to target organisms.

Restaurant. A stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. (SIC code 5812).

Restoration. The return of an ecosystem to a close approximation of its condition prior to disturbance. The Society for Ecological Restoration (SER) further defines ecological restoration as "the process of assisting the recovery and management of ecological integrity. Ecological integrity includes a critical range of variability in biodiversity, ecological processes and structures, regional and historical context, and sustainable cultural practices."

Retail Gasoline Outlet. Any facility engaged in selling gasoline and lubricating oils.

Riparian. The transitional zones between aquatic and terrestrial (or upland) environments. Riparian areas occur as a belt along the banks of rivers, streams, and lakes. Riparian areas occurring along the banks of moving water (i.e., streams or rivers) are often called lotic systems whereas those occurring along the banks of stationary water (i.e., lakes, ponds, or pools) are called lentic systems. As a transitional zone between aquatic and upland environments, riparian systems often exhibit characteristics of both; but they are not as dry as upland environments and they are not quite as wet as aquatic or wetland systems.

Riverine Systems. Riverine systems are the open-water habitats of rivers and streams. Riverine systems typically include all open water areas that occur within a defined channel of a stream as well as along perennial and intermittent stretches of streams and along some major dry washes. In some

cases, riverine systems are bounded by *Palustrine Wetlands* that develop in the floodplain on either side of the defined channel. The riverine system and the adjacent palustrine wetlands are often referred to as *Riparian Habitat*.

Salt Marsh. A salt marsh consists of plant species adapted to salt water that is not diluted by the presence of fresh water. The species of salt marshes are adapted to a higher concentration of salt than are the species of a brackish marsh.

Savanna. A landscape supporting tree cover not exceeding 30 percent and a grassland understory (Pavlik *et al.* 1991).

Significant Effect on the Environment. A significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself is not considered a significant effect on the environment.

Source Control BMP. Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices, or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Sphere of Influence. The probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission (LAFCO) of the County.

Storm Event. A period of rainfall that produces more than 0.1 inch of precipitation and that, which is separated from the previous period of rainfall (storm event) by at least 72 hours of dry weather.

Stream Order. Stream order is a classification based on the branching pattern of river systems. The order of a stream or river is a dimensionless number that indicates how many tributaries it has. The smallest unbranched tributary is designated order 1. A channel formed by the confluence of two first order tributaries is designated as order 2. When two second order streams join, they result in a third order stream; and as streams of equal value meet they result in a stream of the next higher order. In general, the higher the order number, the larger is the watershed and greater are the channel dimension and discharge.

Structural BMP. Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

Survival. Survival is the condition in which a species continues to exist into the future while retaining the potential for recovery. This condition is characterized by a species with a sufficient population, represented by all necessary age classes, genetic heterogeneity, and number of sexually mature individuals producing viable offspring, which exists in an environment providing all requirements for completion of the species' entire life cycle, including reproduction, sustenance, and shelter.

Swainson's hawk nest tree.

Known - a tree used by Swainson's hawks in the recent past, but not used in the last three years.

Active - a tree used in the last three years by Swainson's hawks.

Potential - a tree located in suitable habitat for nesting Swainson's hawks and that is capable of supporting a nest.

Take. As defined by ESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] **Harm** is further defined by FWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. **Harass** is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3]

Tidal. The frequency and duration of inundation due to tidal action is unmodified in tidal areas.

Threatened species. Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. [ESA §3(20)]

Treatment. The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media adsorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP. Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

Unavoidable Impact. An unavoidable impact occurs where there is not a practicable alternative available to avoid or further minimize an impact.

Understory. The shrubs and smaller trees between the forest canopy and the ground cover.

Unforeseen Circumstance. Also referred to as extraordinary circumstance means changes in circumstances surrounding an HCP that were not or could not be anticipated by HCP participants and the Services, which result in a substantial and adverse change in the status of a covered species.

Urban Growth Boundary. An officially adopted and mapped line dividing land to be developed from land to be protected for natural or rural uses. Urban growth boundaries are regulatory tools, often designated for long periods of time (20 or more years) to provide greater certainty for both development and conservation goals.

Urban Limit Line. A boundary, sometimes parcel-specific, located to mark the outer limit beyond which urban development will not be allowed. It has the aim of discouraging urban sprawl by containing urban development during a specified period, and its location may be modified over time.

Vernal Pool. Vernal pools are seasonally flooded depressions found on ancient soils with an impermeable layer such as a hardpan, claypan, or volcanic basalt. The impermeable layer allows the

pools to retain water much longer than the surrounding uplands; nonetheless, the pools are shallow enough to dry up each season. Vernal pools often fill and empty several times during the rainy season. Vernal pools are often distinguished from other seasonal wetlands based on the presence of distinct flora and fauna that is largely restricted to vernal pools and is dominated by native plants.

Vernal Pool Complex. Clusters of vernal pools and associated uplands that occur within a continuous landscape with unobstructed drainage to and from vernal pools. Vernal pool complexes are characterized by similar soils and topography.

Vernal Pool Complex Wetland or Aquatic Component. For the purposes of the Solano HCP/NCCP, the wetland or aquatic component of the vernal pool complex is defined as the area meeting the generally accepted criteria for wetlands or other aquatic sites and as defined by the U.S. Army Corps of Engineers (1987 and applicable technical updates). These communities include areas that support a prevalence of hydrophytic plant species, contain hydric soils, and wetland hydrology and are generally, but not exclusively considered to be waters of the United States and/or waters of the State of California.

Vernal Pool Upland or Watershed. The immediate watershed for vernal pool aquatic habitats shall be defined as those higher elevation areas within the vernal pool complex that are outside of the seasonal inundation zone but within the natural contributing watershed of the individual pool/swale or the pool/swale complex..

Woodland. An open tree-dominated landscape in which trees grow at a cover greater than 30 percent but with canopies seldom overlapping (Pavlik *et al.* 1991).