

## GLOSSARY

**Airspace:** The portion of the atmosphere controlled by a particular country on top of its territory and territorial waters, or more generally, any specific three-dimensional portion of the atmosphere.

**Adaptive management:** Management that acknowledges uncertainty, values science-driven experimentation to test assumptions and predictions, learns from experience, and strives to improve future management actions.

**Battalion:** A tactical military unit typically consisting of a headquarters company and four companies or a headquarters battery and four artillery batteries; the size of a battalion may reach up to approximately 1,200 personnel (see also *company*, *platoon*, and *squad*).

**Best management practice(s) (BMPs):** Within the scope of this INRMP, BMPs are practical, economical, and effective management or control practices that will reduce or prevent water pollution or adverse impacts to natural resources. BMPs are applied as a system of practices based on site-specific conditions rather than a single practice. BMPs are usually prepared by state or federal agencies for land-disturbing activities related to agriculture, forestry, and construction.

**Biodiversity (biological diversity):** The variety of living organisms (species) within an ecosystem and the genetic differences within and among these organisms.

**C4:** A type of plastic explosive.

**Candidate species:** Any species being considered by the Secretary of the Interior or Commerce under the ESA for listing as an endangered or threatened species, but not yet proposed for listing.

**Community:** The assemblage of different species at a particular time and place (see also *ecosystem* and *population*).

**Company:** A subdivision of a military regiment or battalion; the size of a company may reach up to 140 to 170 personnel, but is generally closer to 140 (see also *battalion*, *platoon*, and *squad*).

**Compensation:** Measures taken to offset potential biological effects from actions that may have direct or indirect impacts to federally listed species, critical habitat, or other regulated resources.

**Complexes:** Vernal pool habitat areas that average between 5 and 50 vernal pools, although some contain as few as two vernal pools and others may contain several hundred.

**Conserve/conservation:** Planned management and protection of natural and cultural resources to provide sustainable use and continued benefit for present and future

generations, and the prevention of exploitation, destruction, waste, and/or neglect. The use of all methods necessary to bring a threatened or endangered species to the point at which the ESA is no longer needed. Outside of the ESA, conservation means human efforts to protect natural resources from wasteful practices and to assure a resource base for future generations.

**Consultation:** A structured, analytical process required by the ESA and its implementing regulations. A federal agency makes certain determinations about the impact of their actions on listed species. Thereafter, the federal agency submits its information and conclusions to the USFWS for review and comment. Consultation under these circumstances is not always cooperative.

**Corridor:** Landscape elements that connect similar patches of habitat through a dissimilar matrix or aggregation of patches.

**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 ESA, on which are found those physical or biological features (constituent elements) a) essential to the conservation of the species and b) which may 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 (USFWS & National Marine Fisheries Service 1998).

**Critical uncertainties:** Issues that will significantly determine the ultimate success of any local actions taken in the near future, that are both difficult to predict and likely to impact social, economic, political, technological, and environmental trends.

**Cumulative effects:** Cumulative effects are those effects of future state or private activities, not involving federal activities that are reasonably certain to occur within the action area of the federal action subject to consultation. [50 CFR 402.02] This definition applies only to Section 7 analyses and should not be confused with the broader use of this term in the NEPA or other environmental laws (USFWS & National Marine Fisheries Service 1998).

**Cumulative impact:** A NEPA term that refers to impacts that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Direct effects:** Effects caused by an action and which occur at the same time and place as the action (see also *indirect effects*).

**Disturbance:** Any event that alters the structure, composition, or function of terrestrial or aquatic habitats or directly or indirectly affects species.

**Driver:** A need that must be satisfied for the Base's mission to continue without disruption (e.g., the need to be in compliance with laws and regulations, the need for beach access for amphibious landings, the need for fire management) (HQMC 2000) (see also *event*).

**Dud-producing impact area:** Dud-producing impact areas support the delivery of ground-to-ground and air-to-ground ordnance and may contain unexploded (dud) ordnance. Dud-producing impact areas include the Quebec, Whiskey, and Zulu impact areas, often referred to collectively as the Central Impact Area.

**Ecoregion:** A continuous geographic area with similar climate that permits the development of similar ecosystems on sites with similar properties.

**Ecosystem:** A dynamic and natural complex of living organisms (biotic) interacting with each other and with their associated non-living (abiotic) factors of the environment as a functional unit. All ecosystems are "open" systems in the sense that energy and matter are transferred in and out (see also *community* and *population*).

**Ecosystem management:** A goal-driven approach to managing natural and cultural resources that supports present and future mission requirements; preserves ecosystem integrity; is at a scale compatible with natural processes; is cognizant of nature's timeframes; recognizes social and economic viability within functioning ecosystems; is adaptable to complex and changing requirements; and is realized through effective partnerships among private, local, state, tribal, and federal interests. Ecosystem management is a process that considers the environment as a complex system functioning as a whole, not as a collection of parts, and recognizes that people and their social and economic needs are a part of the whole.

**Endangered species:** A species of fauna or flora that has been listed by the USFWS or the NMFS for special protection and management under the ESA.

**Endangered Species Act (ESA):** The 1973 ESA, as amended, provides for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend, both through federal action and by encouraging the establishment of state programs. The Act:

- Authorizes the determination and listing of species as endangered and threatened.
- Prohibits unauthorized taking, possession, sale, and transport of endangered species.
- Provides authority to acquire land for the conservation of listed species, using land and water conservation funds.
- Authorizes establishment of cooperative agreements and grants-in-aid to states that establish and maintain active and adequate programs for endangered and threatened wildlife and plants.
- Authorizes the assessment of civil and criminal penalties for violating the Act or regulations.

- Authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the Act or any regulation issued thereunder.

Section 7 of the ESA requires federal agencies to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

**Endemic species:** Species that occur naturally in a certain region and whose distribution is limited to a particular locality.

**Enhancement:** The improvement of the physical and biotic characteristics of habitat such that natural processes and productivity are augmented.

**Event:** An incident (e.g., hazardous waste spill) or a driver (e.g., legal requirement) that may or may not lead to the establishment of one or more projects (see also *driver* and *project*).

**Exotic species:** Species that occur in a given place, area, or region as the result of direct or indirect, deliberate or accidental introduction of the species by human activity.

**Eyrie:** The nest of a bird of prey, usually built in a high place such as a tree or cliff.

**Firebreak:** Any natural or constructed barrier bladed or diced to bare earth and used to segregate, stop, and control the spread of fire (see also *fuel break*).

**Flight level:** A standard nominal altitude of an aircraft, in hundreds of feet. It is calculated from the International standard pressure datum of 1,013.25 hPa (29.92 in Hg), the average sea-level pressure, and therefore is not necessarily the same as the aircraft's true altitude either above mean sea level or above ground level.

**Fragmentation:** Division of a large land area (e.g., forest) into smaller patches isolated by areas converted to a different land type.

**Fuel break:** A natural or constructed barrier that includes mowed or modified vegetation and is used to segregate, slow, and control the spread of fire or provide a control line from which to work. Fuel breaks are wider than firebreaks and are not designed to completely stop a fire like a firebreak; rather fuel breaks allow more time for the fire's heat to dissipate before reaching the firefighter (see also *firebreak*).

**Habitat:** An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies its life-cycle requirements.

**Harm:** An act that actually kills or injures wildlife. Such acts may include significant habitat modification or degradation when it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering (USFWS & National Marine Fisheries Service 1998).

**Harass:** An intentional or negligent act which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.

**Hazardous materials:** Defined under the U.S. Department of Transportation (DOT) regulations (49 CFR Parts 106 through 178) as chemicals that are determined by the Secretary of Transportation to present risks to safety, health, and property during transportation. The DOT regulations include requirements for shipping papers, package marking, labeling, and transport vehicle placarding. Specific sections of the federal regulation address shipment by rail, aircraft, vessel, and public highway.

**Hazardous substances:** Defined by the CWA and CERCLA as chemicals that are harmful to aquatic life or the environment and are regulated if spilled or otherwise released to the environment. EPA has designated reportable quantities for each of the hazardous substances. If more than the reportable quantity of a hazardous substance is released to the environment, you are required to cleanup the spill and report it to the appropriate regulatory agency. If less than the reportable quantity is released, you are still required to cleanup the spill, but no report is required. Spill of oil and other petroleum products are also regulated under the CWA when spilled in areas where they will or eventually could enter waterways.

**Hazardous wastes:** Defined and regulated by RCRA as amended by the Hazardous and Solid Waste Amendments of 1984. Under RCRA, a waste is considered hazardous if it meets certain levels of reactivity, ignitability, corrosivity, toxicity, or is listed as a hazardous waste in 40 CFR Part 261. Currently there are about 450 listed hazardous wastes. In general, RCRA regulations address the day-to-day management of these wastes. In comparison, the cleanup of past waste disposal sites is principally regulated under CERCLA.

**Home range:** The area visited by an organism during the course of daily activity.

**Hybrid speciation:** It is the process wherein hybridization between two different closely related species leads to a distinct phenotype. This phenotype in very rare cases can also be fitter than the parental lineage and as such natural selection may then favor these individuals. Eventually, if reproductive isolation is achieved, it may lead to a separate species. However, reproductive isolation between hybrids and their parents is particularly difficult to achieve and thus hybrid speciation is considered an extremely rare event.

**Hypothesis:** An assertion or working explanation that leads to testable predictions; an assumption providing an explanation of observed facts, proposed in order to test its consequences.

**Incidental take:** Take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency or applicant [50 CFR 402.02] (see also *take*).

**Indirect effects:** Effect caused by an action and which occurs later in time or farther removed in distance from the action. Indirect impacts include:

- 1) Growth-inducing effects.
- 2) Effects related to induced changes in the pattern of land use, population density, or growth rate.
- 3) Related effects on the human environment, including the natural and physical environment (see also *direct effects*).

**Integrated Natural Resources Management Plan (INRMP):** An integrated ecosystem management plan showing the interrelationships of individual components of natural resources management (fish and wildlife, forestry, land management, and public access) to mission requirements and other land use activities affecting an installation's natural resources.

**Isolated ephemeral wetlands (IEW):** Depressional wetlands that temporarily hold water in the spring and early summer or after heavy rains. Periodically, these wetlands dry up, often in mid to late summer. They are isolated without a permanent inlet or outlet, but may overflow in times of high water. Ephemeral Wetlands are free of fish, which allows for the successful breeding of certain amphibians and invertebrates (see also *pool, vernal pool* and *wetlands*).

**Lacustrine:** Relating to a lake, or a system of inland wetlands and deep-water habitats associated with freshwater lakes and reservoirs, characterized by the absence of trees, shrubs, or emergent vegetation.

**Listed species:** A species determined by the USFWS to be either threatened or endangered, and that determination has been documented through a public notification process that includes publishing the finding in the Federal Register, and inclusion of the species in the lists maintained in the CFR.

**Mima mounds:** Are mounds of soil some meters tall that occur in various places in the world. Their origin is still unknown. Various theories have been proposed: that they are Indian burial mounds, remnants of glacial activity, interactions of soils with earthquake vibrations, even the actions of giant gophers; however, they are more likely a result of large flow events that mobilize and intermix or roll plant debris and various soils together across a flood plain.

**Migratory bird:** Any avian species listed in 50 CFR 10.13.

**Mitigation:** Measures taken to offset potential adverse biological effects from activities that may have impacts to listed upland species. Mitigation can include avoiding, repairing, rehabilitating, or restoring the affected resource; reducing or eliminating the effect over time by preservation and maintenance operations during the life of the action; and/or ameliorating for the effect by providing substitute resources or environments.

**Mitigation banking:** Actions taken to compensate for future adverse effects of undertakings by providing substitute resources or environments in advance of any specific undertaking.

**Monitor:** To collect or record information that is descriptive of conditions over time. In project development, monitoring is used to evaluate whether or not objectives of a project and its mitigation plan are being realized. In land management, monitoring is used to describe continuous or regular measurement of conditions that can be used to validate assumptions, alter decisions, change implementation, or maintain current management direction.

**Multiple use:** The integrated, coordinated, and compatible use of natural resources so as to achieve a sustainable yield of a mix of desired goods, services, and direct and indirect benefits while protecting the primary purpose of supporting and enhancing the military mission and observing stewardship responsibilities.

**National Environmental Policy Act (NEPA):** NEPA is the basic national charter for the protection of the environment. It establishes policies, sets goals, and provides means for carrying out environmental policy. NEPA requires decision makers to consider the environmental consequences of an applicable action before making the decision to take the action. For certain actions, NEPA requires decision makers to open the decision making process to public scrutiny and involvement.

**Native:** Indigenous; living naturally within a given area.

**Natural:** Substantially unaffected by human activities.

**Natural resources:** All elements of nature, including both physical and biological components.

- 1) Physical Resources: Nonliving resources such as mineral and soil components.
- 2) Biological Resources: Living resources such as plants and animals.

**Non dud-producing impact area:** Non dud-producing impact areas, referred to collectively as “secondary impact areas”, support training activities that utilize small arms firing and the use of non dud-producing ordnance in live fire exercises. Secondary impact areas are scattered across the Base and include Edson Range, X-Ray Impact Area, 409 Impact Area, and Firing Ranges 312A (currently inactive), 313A (currently inactive), and 403 located within the Juliett Training Area (Figure 2-14). Upon request, maneuver activities may be conducted within secondary impact areas (see also *secondary impact area*).

**Occupied habitat:** Those areas currently occupied or utilized by (threatened and endangered) species.

**Palustrine:** Comes from the Latin word *palus* or marsh. Wetlands within this category include inland marshes and swamps as well as bogs, fens, tundra and floodplains.

Palustrine systems include any inland wetland which lacks flowing water, contains ocean-derived salts in concentrations of less than 0.05%, and is non-tidal.

**Patch:** Ecosystem elements (such as areas of vegetation) that are relatively homogeneous internally and that differ from what surrounds them.

**Permanent impact:** Impacts to resources that persist through time (e.g., from development projects). Impacts that involve population or habitat changes that are irreversible (see also *temporary impact*).

**Plan:** A guidance document that may or may not consist of one or more projects or programs (e.g., Erosion Control Plan, Fire Management Plan, MCB Camp Pendleton Masterplan, and USFWS recovery plans) (see also *program*, *project*, and *recovery plans*).

**Platoon:** A subdivision of a military company usually consisting of squads or sections; the size of a platoon may reach up to approximately 40 personnel (see also *battalion*, *company*, and *squad*).

**Pool:** Any depression in the land (including road ruts) with ephemeral ponded water, including but not limited to vernal pools, puddles, potholes, and road ruts (see also *isolated ephemeral wetlands*, *vernal pool*, and *wetlands*).

**Population:** A group of individuals of the same species occurring within the same general location that is geographically separated (or physically isolated) from other such groups. With this biologically based definition, more than one population of the same species may occur on Base; likewise, only a part of a larger population may occur on Base (see also *community* and *ecosystem*).

**Population (occupied habitat) threshold:** The species population size (which may be measured by amount of occupied habitat) below which the Base will meet with the Service to discuss probable cause(s) of decline and necessary remedial actions to facilitate the species population recovery (see also *occupied habitat*).

**Population viability:** Relative measure of the estimated numbers and distribution of reproductive individuals in a species population necessary for that species' continued existence; a minimum number of reproductive individuals in a habitat that will both support them and enable them to interact that is necessary for a species' maintenance (adapted from 36 CFR 219.9).

**Program:** A group or series of related projects (e.g., fire management). A program may be an informal grouping of projects or formalized in a plan (e.g., Fire Management Plan) (see also *plan* and *project*).

**Project:** An action or activity that may be implemented (see also *program* and *plan*).

**Proposed species:** Any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under section 4 of the ESA.

**Recovery plans:** Plans developed by the USFWS for listed species that provides specific management objectives to facilitate the recovery of the species. Recovery plans typically include a listed species' life history and current status, habitat requirements and availability, factors which limit the species' survival, conservation measures currently in place, and specific management objectives that will facilitate recovery of the species.

**Restoration:** Reestablishment of the physical and biotic characteristics of habitat such that critical functions are restored.

**Secondary impact areas:** Non dud-producing impact areas, including Range 409, Edson Range, and the X-Ray Impact Area. Unlike the Central Impact Area, secondary impact areas are scattered throughout the Base and can be used for ground-based training activities (see also *Central Impact Area* and *non dud-producing impact area*).

**Sensitive resources:** Those resources identified as “highly responsive or susceptible to modification by external agents or influences.”

**Seral stage:** The developmental stages of a plant community, not including the climax community; typically, young-seral forest refers to seedling or sapling growth stages; mid-seral forest refers to pole or medium sawtimber growth stages; and old or old-seral forest refers to mature and old-growth stages.

**Significant resources:** Those resources identified as “having special importance,” or as “having or likely to have more influence on a particular aspect of the environment than other components.”

**Simunitions:** A trademark for nonlethal training ammunition produced by General Dynamics.

**Species:** Any population or group of populations of organisms that are capable of interbreeding freely with each other, but not with members of other species.

**Species of Special Concern:** Is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- It is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role.
- It is listed as threatened or endangered under the Federal Endangered Species Act (ESA) but not under the State ESA.
- It meets the State ESA definition of threatened or endangered but has not formally been listed under the State ESA.
- It is experiencing, or formerly experienced, serious (nonscyclical) population declines or range retractions (that have not been reversed) that, if continued or resumed, could qualify it for threatened or endangered status under the State ESA.

- It has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for threatened or endangered status under the State ESA.

**Squad:** The smallest unit of military personnel; a subdivision of a military platoon (see also *battalion*, *company* and *platoon*).

**Stakeholders:** Tribal, state, county, local governments, and private landholders as well as individuals and groups representing local and national interests in federal land management. This is meant to be inclusive of all organizations and individuals with an interest in federal lands.

**Stewardship:** The management of resources entrusted to one's care in a way that preserves and enhances the resources and their benefits for present and future generations.

**Succession:** The more or less predictable changes in species composition in an ecosystem over time, following natural or human disturbance. An example is the development of a series of plant communities (called seral stages) following a major disturbance.

**Sustainability:** The ability to maintain ecological processes and functions, biological diversity, and productivity over time.

**Take:** To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct toward, a federally listed (threatened or endangered) species [ESA 3(19)] (see also *incidental take*).

**Temporary impact:** Impacts to listed species and their habitats that do not persist through time. Impacts that involve population or habitat changes that are reversible. Examples of activities on Base that are considered to cause temporary impacts include ongoing training, maintenance, and recreation (see also *permanent impact*).

**Tenant unit:** FMF (Fleet Marine Force) or other organization/unit not directly under the command of MCB Camp Pendleton that resides on Camp Pendleton.

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

**Tidal prism:** The change in the volume of water covering an area, such as a wetland, between a low tide and the subsequent high tide.

**Vernal pool:** Shallow, ephemeral wetlands with very specific hydrologic characteristics, occurring within a Mediterranean climate region, but only within soil types where there is a seasonally perched water table. A vernal pool is a type of isolated ephemeral wetland (see also *isolated ephemeral wetlands*, *pool*, and *wetlands*).

**Waters of the United States:** This term applies to the jurisdictional limits of the ACOE under the CWA, as defined in 33 CFR 328, and includes all waters which are currently

used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide. Also included are all interstate waters, interstate wetlands, and all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, wet meadows, playa lakes, or natural ponds.

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

**Weed:** Any native or non-native plant growing where it is not wanted that generally reproduce aggressively.

**Wetlands:** Lands where saturation is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Common terms used to describe various wetlands include “marshes,” “bogs,” “swamps,” “small ponds,” “sloughs,” “potholes,” “vernal pools,” and “wet meadows” (see also *isolated ephemeral wetlands, pool, and vernal pool*).

**Wildland fire:** Any non-structure fire that occurs in the wildland.

**Wildlife:** Includes all living non-domesticated plants, animals and other organisms. Federal wildlife policy promotes both the production of certain wildlife for hunting and the conservation of other wildlife facing extinction.

[This page intentionally left blank.]