

10.0 GLOSSARY OF TERMS

Adaptive management. A process in which actions or a set of actions are taken, the effects of these actions are evaluated in terms of achieving overall goals, the actions are modified if they are not achieving the intended results, and information from early efforts is used to guide later efforts.

Adverse impact. A negative effect.

Aesthetic. Having to do with the outward appearance or visual properties. Especially used to describe preferable features.

Alternative actions. A reasonable range of options which can accomplish the objectives of a Proposed Action; for example, alternative locations for the proposed action. Under NEPA, the alternatives are analyzed in the same depth as the proposed action in an EIS to provide a thorough comparison. In addition, a no action alternative should be included in environmental impact analysis. *See also* National Environmental Policy Act, Proposed Action.

Ambient. Surrounding.

Anthropogenic. Of or relating to the influence of human beings on nature.

Artifact. A man-made object taken as a whole.

Attainment. As it pertains to air quality regulation, conforming to local air quality standards.

Avifauna. *Zoology.* Birds of a region or area.

Ballast water. Water confined in specially designed compartments in a vessel's hull that serves to stabilize the vessel.

Baseline conditions. The environmental conditions that exist before a proposed action is implemented. The baseline is used in environmental impact analysis to define the environment that may be impacted due to a proposed action.

Bilge water. Water accumulated in the bottom of a ship.

Biodegradable effluents. Water, bait, and other matter that are discharged and will naturally break down over time.

Biogeographical. Of or relating to the geographic distribution of plants and animals.

Biological Assessment. Under the ESA, each federal agency proposing an action that may affect a listed species is required to conduct an assessment on the species in applying for an exemption to the act (16 U.S.C. 1536).

Bioprospecting. *Biology.* The activity of seeking a useful application, process, or product from nature. In many cases, bioprospecting is a search for useful organic compounds in microorganisms, plants, and fungi (NPS 2003).

Bottom trawl. A type of fishing gear consisting of a cone or funnel-shaped net that is towed or drawn along the seafloor.

Chumash. The native Californians who occupied the Santa Barbara Channel Islands and mainland, from San Luis Obispo to Malibu Canyon along the coast, and inland to the western edge of the San Joaquin Valley (Grant 1978).

Coastal Consistency Determination. A determination of consistency by a federal agency given to the California Coastal Commission for projects in the coastal zone or affecting any land or water use or natural resource of the coastal zone. Not all projects in the coastal zone require a Coastal Consistency Determination; this is regulated by the California Coastal Commission. The process requires consultation with the California Coastal Commission to allow input on the scope of a project. *See also* coastal zone, consultation, significant impacts.

Coastal zone (California). A zone designation established by the California Coastal Commission under the CZMA of 1972. The coastal zone is determined by a number of factors, including habitat values and public access issues.

Commensurate. Having the same quantity, measure, or value as another.

Conservation. Improvement by virtue of preventing loss or injury or other change.

Consultation. A formal meeting process with the lead agency and other federal regulatory agencies to involve other agencies in the preparation of environmental documentation. Some consultations are required under law, such as USFWS or NOAA consultation under Section 7 of the ESA. *See also* lead agency.

Context. Under NEPA, the setting of the proposed action. The significance must be based on several contexts: society as a whole, the affected region, the affected interests, and the locality (Bass and Herson 1993). *See also* National Environmental Policy Act, significant impact.

Consumer surplus. The amount that a person is willing to pay for a good or service over and above what he actually has to pay for a good or service. The value received is a surplus or net benefit. In the case of natural resources, for which there is no owner and a price cannot be charged for use of the resources, consumer's surplus is referred to as a nonmarket economic value since the goods and services from the natural resources are not traded in markets.

Cooperating agency. Under NEPA, an agency, other than the lead agency, that has jurisdiction over or expertise with a particular proposed action and therefore provides input to the lead agency during the environmental impact analysis. *See also* lead agency, National Environmental Policy Act.

Critical habitat. Under the ESA, areas within the geographical area occupied by a listed species on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. Critical habitat is determined by the Secretary of the Interior or Secretary of Commerce when an endangered species is listed and may also include areas outside the geographical area occupied by a listed species that the Secretary determines to be essential for the conservation of the species (16 U.S.C. 1532). *See also* endangered species, Endangered Species Act.

Cumulative impact or effect. An impact that is a result of an incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Diurnal. Pertaining to the day; occurring each day. *Zoology:* Being active (i.e., hunting, feeding, breeding) primarily during the day.

Dredging. The process of scooping or digging out sediment to deepen a channel bed.

El Niño. A Pacific weather pattern that occurs every decade, on average, causing warmer ocean temperatures and more rainfall.

Ecological. *Biology.* Characterized by the interdependence of living organisms in an environment.

Economic impact. Measures the economic importance of a use of resources in terms of expenditures made while undertaking an activity and the associated direct, indirect, and induced effects (multiplier impacts) on sales/output, income and employment (sometimes tax revenues are also included here) in local, regional, and national economies. The measurements used here are often referred to as market economic values because they are the measurements observed in actual transactions in an economy.

Economic rent. A return on investment over and above a normal rate of return on investment. A normal rate of return on investment is the rate of return in which incentives are such that capital will neither outflow or inflow into an industry. This is a special form of producer's surplus.

Economic value. This term generally refers to net economic values such as consumer's surplus, producer's surplus, or a special form of producer's surplus—economic rents (above normal returns to investment). The term also generally refers to the class of economic values called nonmarket economic values because this portion of economic value is not captured in market data.

Ecosystem. *Biology.* A system created by a community of organisms with their physical environment.

Effluent. A material or other matter flowing outward.

Endangered species. *Biology.* Under the ESA, any species that is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary of the Interior to constitute a pest whose protection under the provisions of the ESA would present an overwhelming and overriding risk to humans (16 U.S.C. 1532). *See also* Endangered Species Act.

Endemic. Native, belonging to a particular region.

Environmental Assessment (EA). Under NEPA, a preliminary environmental document prepared by a lead agency for a proposed action that is not considered eligible for a categorical exclusion. The EA determines whether the proposed action would have a significant impact on the environment. If a potentially significant impact is identified, the lead agency must prepare an EIS, which is the next step in the NEPA impact analysis process. *See also* Environmental Impact Statement, lead agency, National Environmental Policy Act, significant impact.

Environmental Impact Statement (EIS). An environmental document under NEPA that is required for federal actions that have a significant impact on some aspect of the human environment. An EIS contains

a description of the proposed action and alternatives, the baseline environment that may be affected by the action, and the impacts associated with the action or alternatives. Also included are mitigation measures designed to reduce impacts to a less than significant level. *See also* Environmental Assessment, lead agency, National Environmental Policy Act, significant impact.

Environmentally preferable. Products or services that are undertaken in way that reduces the impacts on the environment. For example, recycled paper reduces the need for natural resources (i.e., trees) and reduces waste being disposed of in a landfill.

Estuarine. *Botany.* A wetland area occurring near an estuary (waterway where the tide meets a river current).

Evolutionarily Significant Unit (ESU). *Conservation biology.* A population of a species that is reproductively isolated from other population units within the species and represents an important component in the evolutionary legacy of the species.

Fauna. *Biology.* Wildlife.

Feasible. Practical, able to be accomplished successfully.

Flora. *Biology.* Plant life.

Geomorphology. The study of the evolution and configuration of landforms.

Hazardous materials. Substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, would present substantial danger to public health and welfare or to the environment when released.

Hazardous wastes. Hazardous materials that are no longer usable or intended for use. *See also* hazardous materials.

Holocene. *Geology.* A geologic time period of the latter part of the Quaternary Period, extending from the end of the Pleistocene to the present. *See also* Pleistocene.

Hydrocarbon. Organic compounds consisting of only oxygen, hydrogen, and carbon atoms that are the main components of petroleum products.

Hydrologic. Pertaining to the study of water.

Impact. An effect.

Incidental take. Under the ESA, take that is a result of, but not the purpose of, carrying out an otherwise lawful federal action. An “incidental take permit” may be granted by the Secretary of the Interior or Commerce to a federal agency that has prepared a conservation plan that specifies the impacts associated with the taking, mitigation measures to reduce the impacts, and alternatives to the proposed action. *See also* endangered species, take.

Infeasible. Impractical, unable to be successfully undertaken.

Intensity. Under NEPA, the severity of an impact, based on such factors as beneficial effects, public health, unique characteristics, degree of controversy, degree of unique or unknown risk, precedent-setting effects, cumulative effects, presence of cultural or historical resources, or presence of special-status species. *See also* National Environmental Policy Act, significant impact.

Intertidal zone. The zone of marine habitat that is part of the littoral zone above the low-tide mark.

Jurisdiction. The right and power to interpret and apply the law.

Lead agency. The agency or agencies that have taken the primary responsibility for preparing the environmental impact statement for a proposed action under NEPA.

Lightering. At sea transfer of petroleum-based products, materials, or other matter from vessel to vessel.

Listed species. *Biology.* Under the ESA, either an endangered or a threatened species. *See also* endangered species, Endangered Species Act, threatened species.

Lithic. *Geology.* Consisting of or relating to stone or rock.

Long-term impact. An impact lasting for an unspecified or extended period of time.

Mano. A tool, such as a stone or roller, that is used for grinding grains or seeds.

Marine sanitation device. Any equipment on board a vessel that is designed to receive, retain, treat, or discharge sewage, and any process to treat sewage on board.

Maritime. Relating to the ocean.

Market economic value. *See* economic impact.

Mineral. *Geology.* Clay, stone, sand, gravel, metalliferous ore, non-metalliferous ore, or any other solid material or other matter of commercial value.

Mitigation measure. A measure designed to address an environmental problem. Per NEPA, adequate mitigation must, for example, adequately avoid, minimize, rectify, reduce, eliminate, or compensate for an environmental impact caused by a proposed action. *See also* unmitigatable impact.

Multiplier effects of impacts. This term refers to the secondary or ripple effects of spending in an economy for a given activity. Often multiplier impacts are broken down into indirect and induced impacts. Indirect impacts include the purchasing of inputs to produce a good or service such as wages for labor, electricity, water, and sewage services, capital, etc. Induced impacts include the next and following rounds of spending as workers and owners spend their incomes for goods and services and the recipients of this spending repeat this process. For any given economy, this process is limited by how much of the spending stays in the given area. The larger the study area for impact analysis, the larger the multiplier because more of the inputs of production are from the study area.

National Environmental Policy Act (NEPA). U.S. law passed January 1, 1970, creating the Council on Environmental Quality and encouraging productive and enjoyable harmony between people and the environment. Other stated goals include preventing damage to the environment and biosphere, stimulating health and welfare, and enriching the understanding of the ecological system and natural

resources important to the nation. *See also* Environmental Assessment, Environmental Impact Statement, lead agency.

Native. Belonging to a particular region.

Navigation aid. Any instrument used to assist in the guidance of ships or other vessels from place to place.

Nonconformance. Not complying with regulation or determined standards, such as local air quality limits.

Nonrenewable resources. Resources that are not replenished or rejuvenated within a usable time frame, such as petroleum products or old-growth forests.

Nonmarket economic value. *See* consumer's surplus, producer's surplus, and economic rents.

Notice of Intent (NOI). The first step in preparing an EIS is to publish an NOI in the *Federal Register*. In accordance with NEPA, an NOI must include a description of the proposed action and alternatives, a description of the scoping process and any scoping meetings, and the name and address of a contact person within the lead agency. *See also* Environmental Impact Statement, lead agency, National Environmental Policy Act, scoping.

Ozone (O₃). An air pollutant formed photogenically through a reaction with NO_x and VOCs.

Paleocoastal. Early coastal cultures, described by Moratto (1984).

Parameters. Features that may be measured. Often used in scientific or statistical descriptions of a population or subject of study.

Performance indicators. Criteria that are used to evaluate the success of a particular plan or program.

Pier. A vertical structure that support the spans of a bridge.

Pile. A heavy beam of timber, concrete, or steel, driven into the earth as a foundation or support for a structure.

Pleistocene. A geologic time period of the early Quaternary Period, characterized by alternating appearance and recession of northern glaciation and the appearance of the ancestors of human beings.

Precautionary approach. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

Producer's surplus. The amount a producer receives for a good or service above the costs of producing a good or service.

Propagating. *Biology.* Transmitting from one generation to the next.

Proposed action. A planned action that exists at the stage when a lead agency has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal. The Proposed

Action is the preferred alternative of the lead agency. At this stage, the effects of the Proposed Action can be adequately evaluated. *See also* lead agency, National Environmental Policy Act.

Radiocarbon date. An estimated age of an ancient object, such as an archaeological specimen, determined by measuring the amount of carbon-14 (a naturally radioactive isotope of carbon) that it contains.

Reasonably foreseeable. The range of actions or events that will probably occur in the near future.

Reconnaissance. A preliminary study or survey of an area.

Riverine. *Botany.* A wetland occurring near a river.

Roost. *Zoology.* To sit, rest, or sleep atop a pole or tree; a place where birds rest.

Scoping. A public process designed to determine the scope of issues to be addressed in an EIS and to help identify any significant impacts relating to the proposed action. The “scope” of an EIS includes the types of actions to be included, the range of alternatives, and the impacts to be considered. *See also* Environmental Impact Statement.

Seine. A large fish net with sinkers on one edge and floats on the other. A seine hangs vertically in the water and is used to capture fish when its ends are pulled together.

Short-term impact. An impact occurring for a specified and limited amount of time.

Significant impact. Under NEPA, an impact on some aspect of the environment or public health and safety caused by an action that exceeds a set criterion or established threshold. When determining whether an impact is significant, the analyst must consider the “context” in which it will occur and the “intensity” of the proposed action. If a proposed action has the potential for a significant impact, an EIS must be prepared. *See also* Environmental Impact Statement, intensity, National Environmental Policy Act, threshold.

Socioeconomics. The study of society as it relates to the social or economic aspects of a given activity or set of activities. Theory and applied tools from the fields of economics, sociology, anthropology, political science, public administration, and history are used.

Species. *Biology.* Taxonomic group whose members can interbreed and produce viable offspring.

Stringent. As applied to a rule or standard, having rigor, strictness, or severity.

Submerged lands. The lands underlying the waters of the Sanctuary.

Substrate. The material that an organism, such as a plant, lives on or is attached to.

Sustainability. The property of being maintained at length without interruption or weakening.

Threatened species. *Biology.* Under the ESA, any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (16 U.S.C. 1532). *See also* ESA.

Threshold. A point separating conditions that will produce a given effect from conditions that will not produce the effect.

Tomol. A plank canoe used by marine-oriented Native Americans, especially the Chumash. *See also* Chumash.

Total petroleum hydrocarbons (TPH). A measurement of hydrocarbon contamination that can be attributed to petroleum.

Tsunami. A long period sea wave generated by a subsea earthquake or volcanic eruption that may travel thousands of miles. Tsunamis cause damage when they inundate coastal areas.

Turbidity. The measure or state of sediment or other particles suspended in water.

Unconsolidated. Not of one coherent body. *Geology:* unconsolidated sediments, deposits, etc.

Unmitigatable impact. A significant impact that cannot be lessened to insignificance with mitigation. *See also* mitigation measure, significant impact.

Vernal pool. *Biology.* A temporary wetland that forms in a shallow depression underlain by a substrate that restricts the percolation of water into the ground. *See also* wetland.

Watershed. A topographically delineated region or area drained by a stream system. A hydrologic unit frequently used as a physical-biological unit and a socio economic-political unit for management and planning of natural resources bounded peripherally by a water parting and draining ultimately to a particular watercourse or body of water.

Wetlands. *Biology.* Under the Federal Water Pollution Control Act, areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3).