

Glossary

Adverse Effects – INFISH defined adverse effects to fisheries as: Adverse effects include short- or long-term, direct or indirect management related impacts of an individual or cumulative nature, such as mortality, reduced growth, or other adverse physiological changes; harassment of fish; physical disturbance of redds; reduced reproductive success; delayed or premature migration; or other adverse behavioral changes. Adverse effects to designated critical habitat include effects to any of the essential features of critical habitat that would diminish the value of the habitat for the survival of native inland fish.

Alternative - In an EIS, one of a number of possible options for responding to the purpose of and need for action.

Arterial Road - Roads comprising the basic access network for National Forest System administrative and management activities. These roads serve all resource to a substantial extent, and maintenance is not normally determined by the activities of any one element. They provide service to large lands areas and usually connect with public highways or other Forest arterial roads to form an integrated network of primary travel routes. Usually they are developed and operated for long-term land and resource management purposes and constant service.

Basal Area – The area of the cross section of a tree stem including the bark, near its base, generally at breast height, or 4.5 feet above the ground.

Best Management Practices (BMPs) - Practices designed to prevent or reduce water pollution, including sedimentation.

Board Foot (bf) - A unit of wood 12" x 12" x 1".

Canopy - In a forest, the branches from the uppermost layer of trees; in a shrub or grassland, the uppermost layer of shrubs; in a riparian area, the layers of vegetation that project over the stream.

Canopy Closure - The amount of ground surface shaded by tree canopies as seen from above. Used to describe how open or dense a stand of trees is, often expressed in 10 percent increments.

Closed Road - Generally local roads that are physically closed (signs, gates, earthen berms) to public use.

Collector Road - Roads that serve smaller lands areas than a Forest arterial road, and usually connected to an arterial road or public highway. These roads collect traffic from local Forest roads and/or terminal facilities. The location and standard are influenced by both long-term multi-resource service needs, as well as travel efficiency. These roads may be operated for either constant or intermittent service, depending on land use and resource management objectives for the area.

Compaction - Packing together soil particles by exerting force at the soil surface and increasing soil density. Making soil hard and dense, decreasing its ability to support vegetation because the soil can hold less water and air and because roots have trouble penetrating the soil.

Connectivity - The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of fragmentation.

Cover - (1) Trees, shrubs, rocks, or other landscape features that allow an animal to partly or fully conceal itself. (2) The area of ground covered by plants, litter, and coarse fragments, including tree crowns and shrubs that are in direct contact with the ground.

Cultural Resources - The remains of sites, structures, or objects used by humans in the past. They may be historic, prehistoric, archaeological, or architectural in nature.

Cumulative Effects - Impacts on the environment that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Decommissioned Road - A road that is no longer needed and is not planned to be used again. It has been closed and generally has been returned to production. For example, a road that has been ripped (tilled) and planted with vegetation.

Density (stand) - The number of trees growing in a given area, usually expressed in terms of trees per acre.

Developed Recreation - Recreation that requires facilities that in turn result in concentrated use of an area; for example, a campground.

Direct Effects - Impacts on the environment that are caused by an action and occur at the same time and place.

Dispersed Recreation - Recreation that does not occur in a developed recreation sites; for example, hunting or backpacking.

Eastside Screens (aka Regional Forester's Interim Direction Establishing Riparian, Ecosystem and Wildlife Standards for Timber Sales) - Originally signed in 1994 and amended in 1995. The objective of this direction was to provide an approach for maintaining future planning options concerning wildlife habitat associated with late and old structural stages, fish habitat, and old forest abundance. The direction was intentionally restrictive, reflecting a conservative interpretation of riparian, wildlife, and ecosystem needs for the short term. The direction applies to timber sales.

Ecosystem - A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

Endangered Species - A plant or animal species listed under the Endangered Species Act that is in danger of extinction throughout all or a significant portion of its range.

Endangered Species Act (ESA) - An act, passed by Congress in 1973, that directed all Federal departments and agencies to seek to conserve endangered and threatened species. Actions authorized, funded, or carried out by Federal departments and agencies should not jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitat. The act also mandates conferencing with the appropriate agencies.

Environment - The combination of external physical, biological, social, and cultural conditions affecting the growth and development of organisms and the nature of an individual or community.

Environmental Impact Statement (EIS) - A statement of environmental effects of a proposed action and alternatives to it. A Draft EIS is released to the public and other agencies for review and comment. A Final EIS is issued after consideration of public comments. A Record of Decision (ROD) is based on the information and analysis in the Final EIS.

Fire Regime - The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire. Fire regimes can be grouped into three severity regimes: Nonlethal, Mixed, and Stand Replacement. Nonlethal fires are of low to moderate intensity, creeping, surface fires that consume primarily understory grasses, forbs, and shrubs, and leave the overstory trees intact. Stand replacement fires are of high intensity and consume most of an existing stand. Mixed fires are of moderate intensity and consume the understory and some of the overstory.

Forest Plan (Land and Resource Management Plan) - A document that guides natural resource management and establishes standards and guidelines for a National Forest; required by the National Forest Management Act.

Fragmentation (habitat) - The breakup of a large land area (such as a forest) into smaller patches isolated by areas converted to a different land type. The opposite of connectivity.

GIS (Geographic Information System) - An information processing technology to input, store, manipulate, analyze, and display data; a system of computer maps with corresponding site-specific information that can be combined electronically to provide reports and maps.

Ground Cover - Perennial vegetation plus litter and coarse fragments (greater than 2 mm sizes), including tree crowns and shrubs, that are in direct contact with the ground. Based on the erosion hazard class, **effective ground cover** is between 20% and 75% of the ground covered the first year after management activities.

Group Selection - A silviculture system in which trees are removed in small groups.

Habitat - A place that provides seasonal or year-round food, water, shelter, and other environmental conditions for an organism, community, or population of plants or animals.

Headcut – a characteristic of a stream where bank instability and increased water yields have resulted in an entrenched gully that migrates upstream as the stream abandons its associated floodplain.

Hydrologically Closed Road - A road that has been modified to remove water as soon as possible off the road surface to facilitate infiltration into the soil. Generally, sidecast materials and culverts will be removed; relief drainage will be provided to prevent resource damage if culverts plug or fail; and a closure device (barricade, earthen berm, logs, rocks, gates, etc.) will be installed at the entrance.

Hydrologically Stabilized Road - A road that has been modified to remove water as soon as possible off the road surface to facilitate infiltration into the soil. Generally, sidecast materials and unstable landings will be removed and relief drainage will be provided to prevent resource damage if culverts plug or fail.

Inactivated Road - A road that is managed in a stored or closed category for long-term intermittent use. Generally, a single purpose type road that remains open to motorized off-highway vehicles. An inactivated road can be hydrologically stabilized or hydrologically closed.

Indirect Effects - Impacts on the environment that are caused by an action and are later in time or farther removed in distance.

Individual Tree Selection – See Uneven-aged Management

INFISH - Interim Inland Native Fish Strategy for the Intermountain, Northern, and Pacific Northwest Regions (Forest Service). A strategy intended to provide interim direction to protect habitat and populations of resident fish outside of anadromous fish habitat in eastern Oregon, eastern Washington, Idaho, western Montana, and portions of Nevada. The Decision Notice/Finding of No Significant Impact for this strategy was signed on July 28, 1995.

Interdisciplinary Team (IDT) - A team of people that collectively represent several disciplines and whose duty it is to coordinate and integrate the planning process.

Intermittent Stream - A stream that flows only at certain times of the year when it receives water from other streams or from surface sources such as melting snow.

Irretrievable - A category of impacts that applies to losses of production or commitment of renewable resources. For example, while a linear piece of land is being used as a road, some or all of the timber production there is "irretrievably lost." If the road was rehabilitated after use and soil compaction was reduced, timber production could resume; therefore, the loss of timber production during the time the road was in use is irretrievable but not irreversible, because it is possible for timber production to resume if the piece of land is no longer used as a road.

Irreversible - A category of impacts that applies to non-renewable resources, such as minerals and archaeological sites. Losses of these resources cannot be reversed. Irreversible effects can also refer to effects of actions on resources that can be renewed only after a very long period of time, such as the loss of soil productivity.

Issue - A matter of controversy, dispute, or general concern over resource management activities or land uses. To be considered a "key" EIS issue, it must be well defined, relevant to the proposed action, and within the ability of the agency to address through alternative management strategies.

Ladder fuels - Vertical fuels are called ladder fuels. These are trees in the forests understory which provide a ladder for fire to move from the forest floor to the forest overstory.

Late and Old Structure (LOS) - Late and old structure forested stands. See Late Successional and Old Structured.

Late Successional - Forest late seral stages wherein shade tolerant species begin to occupy codominant and eventually dominant positions in the canopy. Most standing dead and down material is small to medium sized, but some mature and recently overmature overstory trees have recently died and are developing as snags. Specific definitions are dependent on current and potential vegetation composition and arrangements.

Listed Species - A wildlife or plant species listed under the authorization of the Endangered Species Act as threatened or endangered.

Local Road - Local roads are usually one-lane roads constructed to serve a dominant use or resource. Local roads do not access large land areas since they are more site-specific than arterial and collector roads.

Management Direction - A statement of goals and objectives, management prescriptions, and associated standards and guidelines for attaining them.

Management Indicator Species (MIS) - Vertebrate species whose population changes are believed to best serve as an index of a biological community's response to the effects of land management activities or which are important for fishing, hunting, and trapping.

Merchantable Timber - Timber that can be bought and sold.

Mitigation - Measures designed to counteract environmental impacts or to make impacts less severe.

Multiple Use Management - The management of public lands and their various resource values so they are used in a combination that best meets the present and future needs of the public.

National Environmental Policy Act (NEPA) - An act, passed by Congress in 1969, that declared a national policy to encourage productive harmony between humans and their environment. This act requires the preparation of environmental impact statements for Federal actions that are determined to be of major significance. (See 40 CFR [Code of Federal Regulations] 1500-1508 for implementing regulations. See also FSH [Forest Service Handbook] 1909.15, the FS Environmental Policy and Procedures Handbook.)

National Forest Management Act (NFMA) - An act, passed by Congress in 1976, that amends the Forest and Rangeland Renewable Resources Planning Act. The act requires the preparation of Forest plans and regulations to guide that development. (Implementing regulations are codified at 36 CFR 219.)

No Action Alternative - The most likely condition expected to exist in the future if current management direction were to continue unchanged.

Obliterated Road - see Decommissioned Road.

Old Growth Management Area - Management area or allocation in the Land and Resource Management Plan intended to provide habitat for old growth associated species.

Old Structure - A forest stand dominated by large trees with early to late seral species compositions. There may be multiple or single canopy layers, dependent on the plant association group and site potential.

Overstory - The upper canopy layer.

Perennial - A plant that lives for three or more years.

Perennial Stream - A stream that flows water year round.

Plant Association Group (PAG) - A group of plant associations that share similar productivities, disturbance regimes, and responses to disturbance. Eight major plant association groups have been described on the Ochocho National Forest.

Preferred Alternative - The alternative identified in a draft environmental impact statement which has been initially selected by the agency as the most acceptable resolution to the problems identified in the purpose of and need for action.

Proposed Action - A proposal made by the Forest Service to authorize, recommend, or implement an action on National Forest System lands to meet a specific purpose and need.

RARE II - Roadless Area Review and Evaluation. A comprehensive process directed by the Secretary of Agriculture to identify roadless and undeveloped land areas in the National Forest System and to determine their uses for either wilderness or other resource management and development and to determine areas that would require future planning to make such a decision.

Record of Decision (ROD) - A document, based on information disclosed in a final environmental impact statement, that identifies the alternative chosen, mitigation and monitoring measures to be implemented, and other information relative to the decision.

Riparian Area - An area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.

Riparian Habitat Conservation Area (RHCA) - A portion of a watershed where riparian-dependent resources receive primary emphasis, and management activities are subject to specific standards and guidelines. RHCAs include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams, (2) providing root strength for channel stability, (3) shading the stream, and (4) protecting water quality. The following Categories of Riparian Habitat Conservation Area have been established by INFISH:

Category 1: Fish-bearing streams: Interim RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of two site-potential trees, or 300 feet slop distance (600 feet, including both sides of the stream channel), which ever is greatest.

Category 2: Permanently flowing non-fish bearing streams: Interim RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of one site-potential tree, or 150 feet slope distance (300 feet, including both sides of the stream channel), whichever is greatest.

Category 3: Ponds, lakes, reservoirs, and wetlands greater than 1 acre: Interim RHCAs consist of the body of water or wetland and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, or the extent of moderately and highly unstable areas, or to a distance equal to the height of one site potential tree, or 150 feet slope distance from the edges of the maximum pool elevation of constructed ponds and reservoirs from the edge of the wetland, pond or lake, whichever is greatest.

Category 4: Seasonally flowing or intermittent streams, wetlands less than 1 acre, landslides, and landslide-prone areas: This category includes features with high variability in size and site-specific characteristics. At a minimum the interim RHCAs must include:

- a. the extent of landslides and landslide-prone areas,
- b. the intermittent stream channel and the area to the top to of the inner gorge,
- c. the intermittent stream channel or wetland and the area to the outer edges of the riparian vegetation,

- d. for Priority Watersheds, the area from the edges of the stream channel, wetland, landslide, or landslide-prone area to a distance equal to the height of one site-potential tree, or 100 feet slope distance, whichever is greatest,
- e. for watersheds not identified as Priority Watersheds, the area from the edges of the stream channel, wetland, landslide, or landslide-prone area to a distance equal to the height of one-half site potential tree, or 50 feet slope distance, whichever is greatest.

Scoping - The early stages of preparation of an environmental assessment or environmental impact statement used to solicit public opinion, receive comments and suggestions, and determine the issues to be considered in the development and analysis of a range of alternatives. Scoping may involve public meetings, telephone conversations, mailings, letters, and other contacts.

Sensitive Species - Species identified by a Regional Forester for which population viability is a concern either (a) because of significant current or predicted downward trends in population numbers or density, or (b) because of significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Seral Stage - A stage in the progression of an ecosystem from initial development to maturity; an age, structure, and development classification for a biological community.

Silviculture - The practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives.

Species - A population or series of populations of organisms that can interbreed and reproduce freely with each other but not with members of other species.

Stand - A group of trees in a specific area that are sufficiently alike in composition, age, arrangement, and condition to be distinguishable from the forest in adjoining areas.

Stream Class - A classification system for streams according to their beneficial uses. **Class I** are perennial or intermittent streams containing one or more of the following characteristics: (1) are the direct source of water for domestic use; and/or (2) are used by large numbers of fish for spawning, rearing, or migration. **Class II** are perennial or intermittent streams containing one or more of the following characteristics: (1) are used by moderate numbers of fish for spawning, rearing, or migration; and/or (2) if fish are not present then flow enough water to have a moderate influence on downstream quality of a Class I or II stream. **Class III** are all other perennial streams not meeting Class I or II definitions. These streams are normally spring fed or have a length greater than 1¼ miles. No fish present due to gradient (steep) or physical or biological barriers. **Class IV** are streams with intermittent flow, defined channel and less than 1¼ mile in length. No fish are present or spring fed sources.

Subwatershed - An area mostly bounded by ridges or other similar topographic features contributing water, organic matter, dissolved nutrients, and sediments to a lake or stream.

Succession - A series of dynamic changes by which one group of organisms succeeds another through stages leading to potential natural community or climax. An example is the development of series of plant communities (called seral stages) following a major disturbance.

Surface fuels - Horizontally arranged fuels are called "surface" fuels. These are trees and other vegetation on the ground surface.

Threatened Species - Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Understory - Grass, small trees, shrubs, and other plants found beneath the overstory.

Uneven-aged Management (HSL) – A combination of actions that simultaneously maintains continuous tall forest cover, recurring vegetation of desirable species, and the orderly growth and development of trees through a range of diameter or age classes. Cutting methods that develop and maintain uneven-aged stands are single-tree selection and group selection.

Uneven-aged Stand - A stand of trees in which there are considerable differences in the ages of individual trees.

Unroaded Area - An undeveloped area of land where there are no improved roads for travel by means of motorized vehicles intended for highway use.

Viable Ecosystems Management Guide - A system to classify vegetation on a landscape basis. This system compares existing vegetation with site potential. It focuses on relationships between combinations of vegetation structure and species composition, and habitat requirements for animals, insects, and plants. This guide was devised by the Ochoco National Forest Viable Ecosystem Quality Action Team. The Viable Ecosystems Management Guide describes a seral/structural matrix for characterizing forest vegetation by plant association groups (PAGs). Each plant association group is further characterized by seral and structural stages. There are three seral stages: E (early), M (middle), and L (late). There are five structural

stages: 1 (grass/forb/shrub), 2 (seedling and sapling, trees less than 4.9 inches dbh), 3 (pole, trees between 5 and 8.9 inches dbh), 4 (small, trees between 9 - 20.9 inches dbh), and 5 (medium and large, trees greater than 21 inches dbh). The seral/structural classification is based on the dominant vegetative features on the site.