

## GLOSSARY AND ACRONYMS

### GLOSSARY

Term	Meaning
<b>Action</b>	The components of a NEPA alternative in terms of what would be done to implement an alternative. Most actions considered in the Fish and Wildlife Implementation EIS are classified as one or more of the following: harvest, hatchery, hydrosystem or habitat actions. <i>See also</i> Implementation Action and 40 CFR §1508.18.
<b>Alternative</b>	In NEPA, one of several options for implementing a project, plan, law, or policy. Alternatives often consist of an overall theme or direction, and more specific actions. <i>See also</i> Policy Direction.
<b>Anadromous fish</b>	Fish that hatch and rear in fresh water, migrate to the ocean (salt water) to grow and mature, and migrate back to fresh water to spawn and reproduce.
<b>Average megawatt (aMW)</b>	The average amount of energy (number of megawatts) supplied or demanded over a specified time.
<b>Capacity</b>	The maximum amount of power that can be produced by a generator or carried by a transmission facility.
<b>Critical habitat</b>	The geographic area occupied by or essential to a species.
<b>Cultural resource</b>	A term for which the meaning is largely derived from and limited by Federal law, regulation, and Executive Orders, and Departmental or agency standards or policies. Cultural resources are specific places that may be or are important in the history of the nation and its peoples. These resources include prehistoric or historic period archeological sites; buildings, or structures of architectural, engineering, or historical associative value; places of importance in history or tradition; and traditional cultural properties, which are resources important in maintaining the traditional lifeways of a community. Within the broad range of cultural resources are those that have recognized "historical significance." Locations or buildings that retain physical integrity and meet the criteria for listing on the National Register of Historic Places specifically are "historic properties" (see below). A fishing ground or site may be an example of a "cultural resource" (and may even be a historic property if it meets the National Register eligibility criteria).
<b>De-listing</b>	Removal of a species or evolutionarily significant unit (ESU) from endangered or threatened status under the Endangered Species Act (ESA).
<b>Dissolved gas</b>	The amount of chemicals in normally occurring as gases, such as nitrogen or oxygen, which are held in solution with water. Usually measured in parts per million.
<b>Drafting (reservoir)</b>	Lowering of the elevation of a storage reservoir
<b>Drawdown</b>	The distance that the water surface of a reservoir is lowered from a given elevation as water is released from the reservoir. Also, refers to the act of lowering reservoir levels.
<b>Ecosystem</b>	The biotic and abiotic characteristics of given area. An ecosystem can be as small as a wetland or as large as a biome (e.g., Great Basin Shrub-steppe Deserts, Tropical Rain Forests of the Lower Amazon Basin, The Columbia River Estuary). They are typically defined by some major habitat characteristics. Each has a unique set of physical, chemical, and climatic

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	characteristics to which the plant and animal life have adapted.
<b>Ecosystem Diagnosis and Treatment (EDT)</b>	An expert opinion and empirical modeling approach to stream and watershed assessments.
<b>Effect</b>	The environmental consequences of an Alternative. Environmental effects can be ecological, aesthetic, historical, cultural, economic, social, or health-related. See also, 40 CFR §1508.8.
<b>Endangered (ESA)</b>	A species of plant or animal in danger of extinction throughout all or a significant portion of its range.
<b>Endangered Species Act (ESA) -</b>	An act passed by Congress in 1973, intended to protect species and subspecies of plants and animals that are of "aesthetic, ecological, educational, historical, recreational and scientific value." The ESA may also protect the listed species' critical habitat, the geographic area occupied by or essential to the species. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share authority to list endangered species, determine critical habitat and develop recovery plans for listed species.
<b>Environmental Impact Statement, or EIS</b>	A document defined by NEPA that presents analysis of the potential environmental effects of implementing a project, law, policies or new directives. It is required when the environmental effects from that change may be significant.
<b>ESU (evolutionary significant unit)</b>	A salmonid population or group of populations that are substantially reproductively isolated from other conspecific population units, and contributes substantially to ecological/genetic diversity of the biological species as a whole.
<b>Existing conditions</b>	The most recent status of the environment. A description of existing conditions is provided to help the reader understand and gauge environmental effects on the environmental variables.
<b>Exotic Species</b>	An introduced species; a non-native species.
<b>Extirpate</b>	To destroy or remove completely, as a species from a particular area, region, or habitat.
<b>Fisheries</b>	<b>In-river</b> – Harvest occurring within freshwater areas. <b>Marine or ocean</b> – Harvest occurring in marine areas.
<b>Fishery</b>	<b>Indian</b> - See "Tribal Fishing Rights." <b>Non-Indian</b> – Fisheries conducted by non-tribal members.
<b>Floodplains</b>	The area along a stream or river that is subject to flooding.
<b>Fry (emergence)</b>	The first free-swimming life stage of a salmonid.
<b>Gas supersaturation</b>	The overabundance of gases in turbulent water, such as at the base of a dam spillway. In fish, can cause fatal condition similar to the bends.
<b>Generation</b>	Act or process of producing electric energy from other forms of energy. Also refers to the amount of electric energy so produced.
<b>Genetic Diversity</b>	The array of genetic traits that exists within a population, due to a large number of slightly dissimilar ancestors, that enables it to adapt to changing conditions.
<b>Hatchery</b>	A facility where fish are collected, spawned, reared, and (typically) released.
<b>Healthy stock</b>	A stock of fish sustaining a long-term growth rate adequate to ensure its continued survival over a wide range of variations in its life cycle.
<b>Hydropower</b>	Electrical power generation through use of the gravitational force of falling water at dams.

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<b>Term</b>	<b>Meaning</b>
<b>Impact factors</b>	Underlying natural or man-made conditions that may affect the amount, location or timing of an environmental impact. Examples are institutions, markets, demographics, and tastes and preferences.
<b>Implementation action</b>	See <i>Action</i> .
<b>Implementation options</b>	Alternative methods or policy instruments for affecting human behavior to achieve actions; for example, regulation, subsidies, education and purchase.
<b>Implementation plan</b>	Generally, a group of actions and implementation options taken to implement a policy direction. Under the 2000 NMFS FCRPS BiOp, one and five year plans prepared by the action agencies to structure how they will comply with the BiOp.
<b>Impoundment</b>	Any human-made structure for retaining the flow of a river or stream that creates a reservoirs.
<b>Incidental take</b>	Take of a threatened or endangered species that is incidental to, and not the directed purpose of, the carrying out of an otherwise lawful activity. See “ <i>Take</i> .”
<b>Indigenous</b>	Existing, growing, or produced naturally in a region.
<b>Instream flows</b>	The amount of water passing a particular point in a stream or river, usually expressed in cubic-feet per second (cfs). Typically concerned with the minimum flow in a stream needed to protect and maintain aquatic life.
<b>Key issues</b>	Important concerns about fish and wildlife policy expressed by stakeholders and individual citizens in the region. Key issues can be actions, effects, or any other stated concern.
<b>Life stage</b>	An organism’s period of development to adulthood.
<b>Listed fish, species</b>	Species determined to be threatened (any species in danger of becoming endangered in the foreseeable future) or endangered (a species in danger of extinction throughout all or a significant portion of it’s range) as allowed under the ESA.
<b>Load</b>	The amount of electric power or energy delivered or required at any specified point or points on a system. Load originates primarily at the energy-consuming equipment of customers.
<b>Mainstem</b>	The principal channel of a drainage system into which other smaller streams or rivers flow. BPA typically uses “mainstem” to mean the Columbia River as opposed to any of its tributaries.
<b>Management responses</b>	Public actions associated with fish and wildlife mitigation and recovery through laws or regulations, development of public policy, or design of official plans, often influenced by the Administration, the general public, or specific interest groups representing a particular concern.
<b>Mitigation</b>	Measures taken to reduce or compensate for adverse environmental effects. Under the Regional Act, BPA has a substantive duty to protect, mitigate, and enhance fish and wildlife, and their habitats, affected by the construction and operation of the FCRPS.
<b>Mitigation hatchery fish</b>	Artificially produced fish that are propagated to compensate for loss or reduction of a specific fish population.
<b>Multi-Species</b>	A collaborative project of the Northwest Power Planning Council, the Columbia River Basin’s Indian Tribes, and the United States to create several

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<b>Term</b>	<b>Meaning</b>
<b>Framework Project</b>	scientifically based, agreed-upon alternatives for determining how best to achieve fish and wildlife mitigation and recovery in the Columbia River Basin.
<b>NEPA</b>	National Environmental Policy Act.
<b>Operating agencies</b>	The federal agencies that operate federal dams in the Federal Columbia River Power System, namely, the Corps of Engineers and the Bureau of Reclamation.
<b>Operating responses</b>	Actions by entities specifically authorized to carry out directives.
<b>Operations (FCRPS)</b>	Management of the FCRPS projects as set forth in the 1995 FCRPS and 1998 Steelhead Supplemental Biological Opinions. Along with establishing certain hard constraints at storage reservoirs, the Biological Opinions established the Regional Forum, which as one of its responsibilities has some flexibility to recommend real-time (i.e., in season) management decision for flow augmentation, spill, and transportation decisions in order to best achieve passage strategies for migrating salmon.
<b>Particulates</b>	Substances that consist of minute separate particles, such as dust or soot.
<b>passive integrated transponder (PIT) tagging</b>	Passive Integrated Transponder tags are used for identifying individual salmon for monitoring and research purposes. This miniaturized tag consists of an integrated microchip that is programmed to include specific fish information. The tag is inserted into the body cavity of the fish and decoded at selected monitoring sites.
<b>Point source discharges</b>	Pollutants discharged from any identifiable point, including pipes, ditches, channels, sewers, tunnels, and containers of various types.
<b>Policy Direction</b>	The overarching theme—whether expressly stated or improvised—that guides and shapes the decisions made by governments, agencies, or other public bodies regarding fish and wildlife mitigation and recovery efforts. Also, a NEPA alternative for fish and wildlife policy in the Pacific Northwest region
<b>Polluted</b>	(1) An area that has been contaminated, especially by a waste material that contaminates air, soil, or water. (2) Any solute or cause of change in physical properties that renders water unfit for a given use.
<b>Population(s)</b>	A group of individuals of the same species occupying a defined locality during a given time that exhibit reproductive continuity from generation to generation.
<b>Reach</b>	A section of stream between two defined points.
<b>Rear</b>	To feed and grow in a natural or artificial environment.
<b>Reclamation Project(s)</b>	Projects constructed under the Reclamation Act and operated by the U.S. Bureau of Reclamation, which administers some parts of the federal program for water resource development and use in western states. The Bureau of Reclamation owns and operates a number of dams in the Columbia River Basin, including Grand Coulee Dam.
<b>Record of Decision, or ROD</b>	The Record of Decision is prepared by the decision-maker to explain the basis for selection of a particular alternative
<b>Redd</b>	A nest of fish eggs covered with gravel.
<b>Refugia</b>	Locations and habitats that support populations of organisms that are limited to small fragments of their previous geographic range.
<b>Resident fish</b>	Reside in fresh water throughout their life cycles.
<b>Response Strategy</b>	Corrective measures required to maintain the selected Policy Direction

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	following economic, political, or environmental changes.
<b>Riparian (zones)</b>	Those terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial and /or intermittent water, associated with high water tables, and soils that exhibit some wetness characteristics.
<b>Run (fish)</b>	A group of fish of the same species that migrate together up a stream to spawn, usually associated with the seasons, e.g., fall, spring, summer, and winter runs. Members of a run interbreed, and may be genetically distinguishable from other individuals of the same species.
<b>Run-of-river dams</b>	Hydroelectric generating plants that operate passing most if not all of their inflow because they lack more than a few feet of elevation for storage above their power head.
<b>Runoff</b>	Water that flows over the ground and reaches a stream as a result of rainfall or snowmelt.
<b>Salmonids</b>	Fish of the family <i>Salmonidae</i> , which includes salmon and steelhead.
<b>Screens/ladders (fish)</b>	Wire mesh screens placed at the point where water is diverted from a stream or river and through a turbine at a dam to help keep fish from entering the diversion or passageway. Fish ladders are devices made up of a series of stepped pools, similar to a staircase, that enable adult fish to migrate upstream past dams.
<b>Sedimentation</b>	The settling of particles that are heavier than water and their deposition on the bottoms of streams and rivers.
<b>Sensitive species</b>	Those species that (1) have appeared in the <i>Federal Register</i> as proposed for classification and are under consideration for official listing as endangered or threatened species, or (2) are on an official state list, or (3) are recognized by the U.S. Forest Service or other management agency as needing special management to prevent their being placed on federal or state lists.
<b>Smolt</b>	Refers to the salmonid or trout developmental life stage between parr and adult, when the juvenile is at least one year old and has adapted to the marine environment.
<b>Smoltification</b>	Refers to those physiological changes anadromous salmonids and trout undergo in freshwater while migrating toward saltwater that allow them to live in the ocean.
<b>Spawn</b>	The act of reproduction of fishes. The mixing of the sperm of a male fish and the eggs of a female fish.
<b>Species of concern</b>	An unofficial status for a species whose abundance is at low levels.
<b>Spill</b>	Releasing water over a dam's spillways rather than channeling it through the powerhouse.
<b>Stock</b>	A specific population of fish. When referring to salmon, a specific population of fish spawning in a particular stream during a particular season.
<b>Storage reservoir</b>	Reservoirs that have space for saving inflow instead of passing it immediately. Retained water is released as necessary for multiple uses – power production, fish passage, irrigation and navigation.
<b>Status Quo</b>	A policy direction defined by current policies, used as the No Action Alternative in the Fish and Wildlife Implementation EIS.
<b>Subbasin</b>	A watershed area defined by 4 <sup>th</sup> –field USGS hydrologic unit code; the size

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	averages 200,000 hectares.
<b>Supplementation</b>	Releasing hatchery produced fish into the wild in an effort to try and reestablish or increase the size of a naturally spawning population.
<b>Take (legal/illegal)</b>	Under the Endangered Species Act, “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect an animal, or to attempt to engage in any such conduct.
<b>Threatened (ESA)</b>	A genetic population that is at risk of becoming endangered in the foreseeable future.
<b>TMDL</b>	Total Maximum Daily Load is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s source (Environmental Protection Agency).
<b>Transport(juvenile)</b>	Collection and transport via barge and truck of out-migrating juvenile salmonids from several FCRPS collection projects to a location downstream from Bonneville Dam, the lowermost dam on the Columbia River.
<b>Tribal fishing rights</b>	Generally understood to be the rights reserved by tribes in their treaties with the United States, although tribes may also have fishing rights based on Executive Orders, statutes, or aboriginal claims.
<b>Trust obligations/ responsibility</b>	The obligation of the United States to all tribes, shared by Congress and all federal agencies. . In <i>U.S. v. Mitchell</i> , the Supreme Court required the elements of a common law trust be present to make the trust responsibility enforceable. The elements of a trust are: (1) trust property (2) managed by a federal agency under specific statutory guidance (3) on behalf of Indian beneficiaries. <i>United States v. Mitchell</i> , 463 U.S. 220-22 (1983).
<b>Turbidity</b>	The cloudiness of water caused by suspended matter that interferes with the passage of light through the water or in which visual depth is restricted.
<b>Water quality limited</b>	A water body that does not meet the federally approved state water quality standard established under the provision of the Clean Water Act.
<b>Watershed</b>	A watershed area defined by 5 <sup>th</sup> –field USGS hydrologic unit code; the size ranges between 20 and 40,000 hectares.
<b>Wetland(s)</b>	Areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil condition for growth and reproduction (Executive Order 1990). Examples of wetlands include swamps, marshes, and bogs.

## **ACRONYMS**

All H	The "All H" paper (referring to hydro, habitat, hatcheries, and harvest). Now titled the Basin-wide Salmon Recovery Strategy.
BIA	Bureau of Indian Affairs
BiOp	Biological Opinion
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
Bureau	Bureau of Reclamation
CEQ	Council on Environmental Quality
Corps	U.S. Army Corps of Engineers
Council	Northwest Power Planning Council
CREP	Conservation Reserve Enhancement Program
CRITFC	Columbia River Inter-Tribal Fish Commission
CVA	Columbia Valley Authority
CWA	Clean Water Act
DOI	Department of Interior
EIS	environmental impact statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESU	evolutionarily significant unit
FBS	Federal Banking System
FCRPS	Federal Columbia River Power System
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act of 1976
Forum	Columbia River Basin Forum
FPC	Federal Power Commission
FWIP EIS	Fish and Wildlife Implementation Plan EIS
H	See All H
HCP	Habitat Conservation Plans
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IFDG	Idaho Department of Fish and Game
LRMP	land and resource management plans

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MOA	Memorandum of Agreement
MSR	Maximum Sustainable Revenue
MUSYA	Multiple-Use Sustained Yield Act of 1960
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPS	National Park Service
NRCS	Natural Resource Conservation Service
PIT	Passive Integrated Transponder” tags,
PMA	Power Marketing Authority
PNCA	Pacific Northwest Coordination Agreement
Regional Act	Pacific Northwest Electric Power Planning and Conservation Act
ROD	Record of Decision
RTO	regional transmission organization
SAR	smolt to adult returns
SOR	System Operation Review
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WNP	Washington Nuclear Projects

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Canadian Environmental Assessment Agency, Hull, Quebec, Canada  
Ministry of Environment, Lands, and Parks, Victoria, British Columbia, Canada  
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Northwest Power Planning Council, Boise, ID  
Northwest Power Planning Council, Helena, MT  
Northwest Power Planning Council, Pendleton, OR  
Northwest Power Planning Council, Portland OR  
Northwest Power Planning Council, Spokane, WA  
Northwest Power Planning Council, Vancouver, WA

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Idaho Association of Counties, Boise, ID  
Montana Association of Counties, Helena, MT  
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Port of Vancouver, Vancouver, WA  
Washington State Association of Counties, Olympia, WA

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University of Montana, Mansfield Library, Missoula, MT  
University of Nevada, Reno University Library, Reno, NV  
University of New Mexico, Zimmerman Library, Santa Fe, NM  
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Common Sense Salmon Recovery, Olympia, WA  
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Ducks Unlimited, Inc., Rancho Cordova, CA  
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For the Sake of Salmon, Portland, OR  
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Northwest Sportfishing Industry Association, Oregon City, OR  
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Oregon Trout, Portland, OR  
Oregon Water Trust, Portland, OR  
Pacific Fishery Management Council, Portland, OR  
Pacific Northwest Waterways Association, Vancouver, WA

***Fish and Wildlife Implementation Plan DEIS***  
**List of Those to Whom the EIS Was Sent**

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Pacific States Marine Fisheries Commission, Gladstone, OR  
Salmon for All, Chinook, WA  
Save Our Wild Salmon, Seattle, WA  
Sierra Club, Seattle, WA  
Sierra Club, Spokane, WA  
Sun Mountain Reflections, Portland, OR  
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Pacific Northwest Generating Cooperative, Portland, OR  
Public Power Council, Portland, OR

**MEDIA**

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Chronicle, Omak, WA  
The Oregonian, Portland, OR

**BUSINESSES**

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Wiser, Ralph; Yamhill, OR

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DOE/BP-3379

May 2001

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