

Chapter 9 Glossary and Acronyms

This chapter contains a list of acronyms, abbreviations, and technical terms used in this EIS. Words that would be defined in a desk-size dictionary (for example, the College Edition of the American Heritage Dictionary) are not included.

Acronyms

BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
CBFWA	Columbia Basin Fish and Wildlife Authority
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
cfs	cubic feet per second
cm	centimeter
Corps	U.S. Army Corps of Engineers
Council	Northwest Power Planning Council
CRFMP	Columbia River Fish Management Plan
CWA	Clean Water Act
dba	decibels (A-weighted)
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
ft	feet
gpm	gallons per minute
ha	hectares
IAT	Impact Assessment Team
IDFG	State of Idaho, Department of Fish and Game
IHOT	Integrated Hatchery Operations Team

IHS	Indian Health Service
<u>ISG</u>	<u>Independent Scientific Group</u>
ISS	Idaho Supplementation Studies
m	meter
mm	millimeter
m ³ /min	cubic meters per minute
LSRCP	Lower Snake River Compensation Plan
M & E Plan	Monitoring and Evaluation Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPT	Nez Perce Tribe
NPTEC	Nez Perce Tribal Executive Committee
NPTH	Nez Perce Tribal Hatchery
NPTH GRA	Nez Perce Tribal Hatchery Genetic Risk Assessment
NRCS	U.S. Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWP	Nationwide Permits
RCRA	Resource Conservation and Recovery Act
RHCA	Riparian Habitat Conservation Area
RMO	Riparian Management Objective
SDM	Smolt Density Model
Selway GRA	Selway Genetic Resource Assessment
SHPO	State Historic Preservation Office
SWPP	Storm Water Pollution Prevention Plan
TSCA	Toxic Substances Control Act
USBR	U.S. Bureau of Reclamation

USDOE	U.S. Department of Energy
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VQO	Visual Quality Objectives

Technical Terms

- acclimation** Allowing fish to adjust to environmental variables. Older hatchery practices resulted in high mortalities because the young fish were released directly from the hatchery, without a chance for them to adjust to the natural stream environment. Acclimation is a process which is used to allow the fish to gradually adjust to a more natural environment and imprint on the area in which the acclimation site is located, rather than on the hatchery, so that the fish will return to the area to spawn.
- acclimation site** Sites at which young fish are held in artificial ponds to allow them to imprint so that they return to that place to spawn.
- adaptation** Genetic change over generations through natural selection that results in a population better suited to its environment.
- adaptive management** Using management actions as part of an experimental design to refine understanding concerning scientific questions. As a result of these experiments, management should adapt, resulting in improved response to environmental problems. (Return to the River, ISG, 1996).
- adfluvial** A fish that spawns in a river and rears in lakes.
- aggregate** Multiple fish stocks within a species or race.
- anadromous fish** Fish that migrate from fresh to saltwater when young, spend the majority of their adult life in the ocean, and then return to their ancestral drainage to spawn.
- backwater** The water level controlled or determined by a downstream obstruction.
- bankfull flow** Considered to represent the dominant discharge associated with channel-forming events.
- biological opinion** Document stating the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service on whether a federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat.

- biomass** Total weight of organisms per unit volume.
- bottomland** Nearly level land on the bottom of a valley that has a stream running through it. Subject to flooding and often referred to as a floodplain.
- breaklands** A landform of the region that is relatively steeply sloping, typically has basalt outcrops, and represents a transitional zone between the valley bottoms and upland basins.
- broodstock** Fish that will be spawned to create hatchery stock.
- carbon monoxide** An odorless and colorless gas formed from one atom of carbon and one atom of oxygen.
- carrying capacity** The maximum number or biomass of fish that could potentially be supported by a given habitat, as determined by prevailing physical, chemical, and biological conditions.
- chinook** (*Oncorhynchus tshawytscha*). Also called king, tule, or brights.
- coho** (*Oncorhynchus kisutch*). Also called silver salmon.
- Columbia River Basin** The drainage of the Columbia River which includes parts of Canada, the Pacific Northwest, and parts of Montana, Wyoming, and Nevada.
- critical habitat** Minimum amount of habitat necessary for survival and enough area for the species to expand and recover to healthy population levels.
- cumulative impact** Cumulative impacts are created by the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions.
- domestication selection** Natural selection for traits which affect survival and reproduction in a human-controlled environment.
- donor stock** Specific stock from which broodstock are chosen.
- egg-eyeing station** Place where eggs are incubated.
- egg take** The number of eggs needed to produce the next generation of adults.
- escapement** Fish that are allowed to spawn naturally.
- evolutionarily significant unit** A population or group of populations that is considered distinct (and hence a "species") for purposes of conservation under the ESA. To qualify as an ESU, a population must: (1) be reproductively isolated from other conspecific populations; and (2) represent an important component in the evolutionary legacy of the biological species.

- eyed-eggs** Life stage of a fertilized egg between the time the eyes become visible and hatching occurs.
- facility** Fish culture facility used for incubation and rearing of salmon and steelhead.
- fault zones** An area where two moving geologic formations come in contact with one another.
- fingerling** Juvenile salmonid; usually refers to presmolt fish.
- floodplain** Nearly level lands, consisting of stream sediments, that borders a stream and is subject to flooding unless protected artificially.
- fry** Juvenile salmonid life stage following absorption of yolk sac.
- gamete** A sex cell (i.e., sperm or egg cell).
- gloryhole** A term used for an hydraulic placer mine.
- gneiss** A banded metamorphic rock with the same composition as granite.
- harvest augmentation** Producing fish principally for harvest.
- Heath tray** A particular type of container for holding fertilized eggs in a fish hatchery during the period of incubation.
- homing** Navigational behavior that guides species during migrations.
- igneous rock** Rock that has been formed by the cooling of molten mineral material. (Examples: granite and basalt).
- imprinting** The physiological and behavioral process by which migrating fish assimilate environmental cues to aid their return to their stream of origin as adults.
- infiltration gallery** A water collection structure located in the gravels beneath the riverbed which allows collection of silt-free water.
- introgression** Loss of, or changes in, population identity including loss of diversity among populations, characteristics of adaptation with populations, or of other evolved features of genetic organization (may occur through crossbreeding or inadvertent effects of artificial selection).
- jeopardy** To jeopardize the continued existence of or to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
- jump start** Starting or setting in motion a stalled system or process.
- jurisdictional wetlands** Those 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.

landslide Any mass-movement process characterized by downslope transport of soil and rock, under gravitational stress, by sliding over a discrete failure surface; or the resultant landform. Can also include other forms of mass wasting not involving sliding (rockfall, etc.).

loam Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

loess Finely grained material, dominated by silt-sized particles and deposited by wind. The particles originated from the ground-up rock and debris from glaciers, trapped and carried in ice, and deposited during ice melt.

long-term genetic fitness A measure of the ability of a population to survive natural selection over a number of generations.

mainstem The main section of a river.

mass failure An event occurring on steep slopes with physical characteristics that allow failure of stable landforms. Soil properties may include low permeability, high water content, and high slope resulting in large scale failure and movement of surface material.

mass wasting The slow downward slope of rock debris.

mitigate To take steps to lessen the effects predicted for each resource, as potentially caused by the proposed action or alternatives. Steps may include reducing the impact, avoiding it completely, or rectifying or compensating for the impact.

modification and maximum modification The VQOs that apply to less visually-sensitive areas where changes can dominate the natural landscape but should look natural from a long distance.

natal Of or relating to the place of one's birth.

naturally reproducing Adult fish spawning in a stream or river regardless of how parents were spawned, specifically if spawned at a hatchery.

nitrogen oxides A group of compounds consisting of various combinations of nitrogen and oxygen atoms.

nominal Current value; not adjusted for inflation as in real dollars.

nonrenewable A commodity or resource that is exhaustible or not replaceable.

omnivorous Eating both plant and animal substances.

100-year floodplain That portion of a river valley adjacent to the stream channel which is covered with water when the stream overflows its banks during a 100-year flood event. A 100-year flood event is one that has a 1 in 100 chance of happening in any given year.

outplant Outplanting is the process by which artificially propagated fish are released into a natural system.

ozonation The process of using ozone gas as an oxidizing agent to kill disease-causing organisms in a water supply.

Palouse steppe A landform of the region consisting of the upland rolling hills and river drainages that lie at an elevation above the valley bottom and breaklands.

parr Juvenile salmonids develop bar-shaped marks on their sides called parr marks between becoming fry and smolting.

partial retention The VQO that applies to areas where activities may be evident but must remain subordinate to the natural landscape. These visually sensitive areas are along major state and federal highways, wild and scenic river corridors, and other high public use areas.

pathogen A disease-causing agent.

permeability The quality of a soil horizon that enables water or air to move through it. Terms used to describe permeability include; very slow, slow, moderately slow, moderate, moderately rapid, rapid, very rapid.

pH The symbol for the chemical measurement of the acidity or alkalinity of a solution.

PIT tag Short for passive integrated transponder, it is used to identify individual fish for monitoring and research. This miniature tag has an integrated microchip that contains information about the specific fish in which it is placed, and transmits that information from within the live fish.

piscivorous Fish eating.

placer A place where a deposit is washed to remove its mineral content.

population A group of individuals of a species living in a certain area.

population viability The overall condition and long-term probability of survival of the fish population.

predation The harm, destruction, or consumption of a prey organism by an animal predator.

preservation The VQO that applies to wilderness and other special areas where the natural landscape should be unaltered by forest management activities.

presmolts Juvenile spring chinook salmon that are 100-150 mm (4-6 inches) long in the fall. They smolt and migrate to the ocean the following spring.

production Number of individuals produced from a natural environment or fish culture facilities.

province An area of land less extensive than a region and having a characteristic plant and animal population.

race A group of individuals within a species, forming a permanent variety; a particular breed.

raceway Holding area or rearing facility for juvenile or adult salmonids in a hatchery.

ravel Downslide movement of noncohesive soil or rock particles under the influence of gravity. A form of soil creep.

recreational river A Wild and Scenic Rivers Act of 1968 designation that has specific criteria for the level of development.

redd A salmon nest.

reproduction The process of forming new individuals of a species by sexual or asexual methods.

retention The VQO that applies to areas where activities should not be evident to the casual forest visitor.

riparian habitat The zone of vegetation which extends from the water's edge landward to the edge of the vegetative canopy. Associated with watercourses such as streams, rivers, springs, ponds, lakes, or tidewater.

salmonid Belonging to the family salmonidae, i.e., salmon, trout, steelhead, whitefish.

satellite facility Fish culture facility used for rearing and acclimation of juvenile salmon or holding of adult broodstock.

schist A metamorphic rock consisting of laminated, often flaky parallel layers.

seine A large net used to catch fish.

seismicity Earthquake activity.

sensitive species Those plants and animals identified by the Regional Forester for which population viability is a concern as evidenced by significant current or predicted downward trend in populations or density and significant or predicted downward trend in habitat capability.

- silt** Individual mineral particles in a soil that range in diameter from the upper limit of clay (0.002 mm) to the lower limit of very fine sand (0.05 mm).
- silty-loams** A mixture of silt and loam particles consisting of clay and sand mineral particles that range in diameter from less than 0.002 mm to 0.05 mm.
- slump** Deep, rotational landslide, generally producing coherent movement (back rotation) of blocks over a concave failure surface. Typically, slumps are triggered by the buildup of pore water pressure in mechanically weak materials (deep soil or clay-rock rock).
- smolt** Juvenile salmon undergoing metamorphosis into a saltwater fish, usually during the downstream migration period.
- species** A group of interbreeding individuals not interbreeding with another such group; similar, and related species are grouped into a genus.
- species of special concern** Native species that are either low in number, limited in distribution, or have suffered significant population reductions due to habitat losses. The list includes three categories of species:
- a. Species which meet one or more of the criteria above and for which Idaho presently contains, or formerly constituted, a significant portion of their range (i.e. priority species);
 - b. Species which meet one or more of the criteria above, but whose populations in Idaho are on the edge of a range that falls largely outside the state (i.e. peripheral species);
 - c. Species that may be rare in the state but for which there is little information on their populations status, distribution, and/or habitat requirements (i.e., undetermined status species).
- steelhead** The sea going rainbow trout, reclassified as a Pacific Salmon in 1989.
- stock** A distinct management or genetic unit of fish.
- subbasin** Subdivision of a larger drainage basin. The drainage or catchment area of a stream which along with other subbasins make up the drainage basin of a larger stream.
- substrate** The material comprising the bed of a stream.
- subyearling smolts** Juvenile salmonids that physiologically mature and migrate to the ocean when less than one year old; e.g., certain stocks of fall and summer chinook.
- sulfur oxides** Various combinations of sulfur and oxygen; one of the most common being sulfur dioxide, which is a gas at normal

temperatures and pressures in the atmosphere. Sulfur oxides combine with particulates and moisture to produce acid rain.

supplementation The use of artificial propagation in the attempt to maintain or increase natural production while maintaining the long-term fitness of the target population, and while keeping the ecological and genetic impacts on non-target populations within specified biological limits.

sympatric Coextensive distribution among animal and plant species.

terminal areas Harvest in the spawning streams to which adults return as opposed to harvest in the mainstem river.

terrace An old alluvial plain, ordinarily flat or undulating, bordering a river, lake or the sea. Stream terraces are frequently called second bottoms, as contrasted to floodplains, and are seldom subject to overflow.

thermal regime Temperature regime.

tribal land Land that is collectively owned by the Nez Perce Tribal Government.

volatile organic compounds (VOC) Compounds containing carbon that evaporates readily at normal room temperature and pressure. VOCs react with sunlight to form ozone.

water hardened Water hardening is the process of placing fertilized eggs in water so that the egg absorbs the water that accumulates in the space between the egg yolk and outer membrane.

weir A fence or a barrier placed in a stream to catch, retain or count fish.

wild fish A fish that has not spent any part of its life history in an artificial environment and are the progeny of naturally-reproducing salmon regardless of parentage.

wild and scenic river A river within the national wild and scenic river system that offers outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values designated by Congress under the Wild and Scenic Rivers Act of 1968 for preservation of their free-flowing condition.

within population variability The quantity and variety of alleles, chromosomes, and arrangement of genes on the chromosomes that are present in populations.

zone 6 The Treaty Indian Set-Net fishery from Bonneville Dam to McNary Dam, 140 miles of river open to commercial fishing. Zones 1-5 are the drift gill-net fishery from Astoria to Bonneville Dam, 140 miles open to commercial fishing.