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# **Appendix A**

## **Glossary of Terms**

## GLOSSARY OF TERMS

***All definitions below are for the use of this document only unless specifically associated with a Regulation or Law.***

ACT – The Endangered Species Act of 1973, as amended, 16 U.S. C. 1531 *et seq.*

ACTION – All activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. [50 CFR 402.02]

ACTION AREA – Action area is defined by the consultation regulations as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” [50 CFR 402.02]

ACTIVE REDD - A location in the stream or river where salmon eggs have been deposited in the gravel.

ADFLUVIAL – Migrating between lakes and streams.

ADJACENT – “Adjacent” has two different definitions within this document. (1) In regards to “not in or adjacent to...”, “adjacent” means within 300 linear feet. This is used when restricting projects from impacting special aquatic sites (such as an eelgrass bed or wetland) and/or salmonid spawning areas or a forage fish spawning areas. (2) In regards to “adjacent” wetlands, adjacent is defined based on EPA regulations as “bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are ‘adjacent’ wetlands.” [40 CFR 230.3(b)]

AFFECT/EFFECT – To affect (a verb) is to bring about a change. The effect (usually a noun) is the result.

ALEVIN – Life-history stage of a salmonid immediately after hatching and before the yolk sac is absorbed. Alevins usually remain buried in the gravel in or near the egg nest (redd) until their yolk sac is absorbed when they swim up and enter the water column. [Myers, et al. 1998]

ANADROMOUS – The life-history pattern of a fish that features egg incubation and early juvenile development in freshwater, migration to seawater for adult development, and return to freshwater for spawning. [Myers, et al. 1998]

APPLICANT – Any person (an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, or any State,

municipality, or political subdivision of a State, or any other entity subject to the jurisdiction of the United States) [ESA 3(12)] who requires formal approval or authorization from a Federal agency as a prerequisite to conduct the action. [50 CFR 402.02]

**APPROVED WORK WINDOW** - As used in this document, this means the period of time that work may occur within a given waterbody so as to avoid or minimize impacts to all life stages of threatened or endangered fish presence or their forage species (refer to Appendix C for the current list). Approved work windows may be changed or amended in the future.

**AVOIDANCE** – “Avoidance” refers to the first step in “mitigation sequencing” -- Avoiding the impact to the resource of concern altogether by not taking a certain action or parts of an action. [40 CFR 1508.20(a)] (See MINIMIZATION, MITIGATION, and SEQUENCING)

**BENTHIC** – Organisms living on or within the substrate of a stream, lake or marine/estuarine areas.

**BERM** – A levee, shelf, ledge or bench along a stream bank that may extend laterally into the channel to partially obstruct the flow, or parallel to the flow to contain the flow within its stream banks. May be natural or man-made.

**BEST MANAGEMENT PRACTICES (BMP)** – A practice or combination of practices that is determined by a state (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality and related aquatic-riparian habitat goals (40 CFR 130.2(q)). BMP's also refer to a broader process of identifying practices and techniques that may be used to reduce impacts on resources. It is this latter concept that is used in summarizing “state-of-the-art” techniques and practices. (American Fisheries Society, Western Division, 1982.) Examples of the Corps BMP's as outlined in the regulations can be found in 33 CFR 323.4(6). WDFW has a set of BMP's outlined in the Wild Salmonid Policy to set standards in habitat protection and restoration, genetics conservation, harvest strategies, hatchery operations and other key issues. (For examples, refer to Appendix F - Implementation Conditions.)

**BIODEGRADABLE** - According to established ASTM (American Society of Testing Material) procedures the following is the definition of biodegradability: A minimum of 40% of the original sample has been decomposed to inert ingredients within twenty eight (28) days.

**BIOLOGICAL ASSESSMENT/EVALUATION** – Information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. The outcome of this biological assessment/evaluation determines whether formal consultation or a conference is necessary. [50 CFR 402.02, 50 CFR 402.12]

**BMP** – see Best Management Practices

**CANDIDATE SPECIES** – Plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. [61 FR 7596-7613]

**CHANNELS** – The bed of a stream or waterway.

**CHANNEL MIGRATION ZONE (CMZ)** – As used in this document, this term refers to “the lateral extent of likely movement along a stream reach with evidence of active stream channel movement over the past 100 years. Evidence of active movement can be provided from aerial photos or from specific channel and valley bottom characteristics.” A CMZ does not extend behind a permanent dike or levee if it is a continuous structure that either limits lateral channel movement and would contain a 100-year flood or supports a public right-of-way or conveyance route and receives regular maintenance. A dike or levee shall not be considered "permanent" if the structure is perforated by pipes, culverts or other drainage structures that allow for the passage of any life stage of fish, and the area behind the dike or levee is below the flood prone zone. [Washington State Forest Practices, Rules, WAC 22, including Emergency Rules, Board Manual, FPA RCW 76.09, 2000.]

**CHAR** – Any of several fishes of the genus *Salvelinus*, including both bull trout and Dolly Varden.

**COMPLETE PASSAGE BARRIERS** - Instream structures or debris accumulation that blocks anadromous fish use of the upper watershed. [WDFW, 1999] (See PARTIAL PASSAGE BARRIERS and TEMPORAL PASSAGE BARRIERS)

**CONFERENCE** – A process of early interagency cooperation involving informal or formal discussions between a Federal agency and the Services pursuant to Section 7 (a)(4) of the Act regarding the likely impact of an action on proposed species or proposed critical habitat. Conferences are (1) required for proposed Federal actions likely to jeopardize proposed species, or destroy or adversely modify proposed critical habitat; (2) designed to help Federal agencies identify

and resolve potential conflicts between an action and species conservation early in a project's planning; and (3) designed to develop recommendations to minimize or avoid adverse effects to proposed species or proposed critical habitat. [50 CFR 402.02, 50 CFR 402.10]

CORPS – U.S. Army Corps of Engineers, Seattle District, Regulatory Branch.

CRITICAL HABITAT - For species listed 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 Act, 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. [ESA 3(5)(A)] Designated critical habitats are described in 50 CFR 17 and 226.

CY – “cubic yards”

DESTRUCTION OR ADVERSE MODIFICATION OF CRITICAL HABITAT – A direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species.

DISTINCT POPULATION SEGMENT (DPS) – “Population,” or “distinct population segment,” are terms with specific meaning when used for listing, delisting, and reclassification purposes to describe a discrete vertebrate stock that may be added or deleted from the list of endangered and threatened species. The term “population” will be confined to those distinct population segments officially listed, or eligible for listing, consistent with section 4(a) of the Act and the Services’ population policy. [61 FR 4722-4725]

DIVERSION - A removal of surface flow from the channel often used during construction to temporarily dewater a work area.

DPS – See Distinct Population Segment.

DRAINAGE AREA – Total land area draining to any point in a stream, as measured on a map, aerial photo or other horizontal plane. Also called catchment area, watershed, and basin.

ECOLOGY - Washington State Department of Ecology.

ECOLOGICALLY SIGNIFICANT UNIT – An “Ecologically Significant Unit” (ESU) is a population or group of populations that is substantially reproductively isolated

from other conspecific populations and represents an important component in the evolutionary legacy of the species. [16 USC 1532(16) (1998)]

EELGRASS – Eelgrass (*Zostera marina* or *Zostera japonica*) is a rooted plant that grows in intertidal and shallow subtidal estuarine and marine areas. It is distinguished by flat, grass-like leaves up to 1.4 cm (about 3/4 of an inch) wide and can be over 3 meters (6 feet) in length (height and width varying by species). The upright stems originate from an underground rhizome. The seeds are enclosed in elongated membranous, translucent packets. Eelgrass occurs up to about 1.8 meters (6 feet) above MLLW and as deep as 6.6 meter (22 feet) below MLLW, elevations varying by species. Both species grow well in sandy or muddy substrate and may be found along both low and moderate energy shorelines throughout Puget Sound. [US Army Corps of Engineers, 1984]

EFFECTS OF THE ACTION – The direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action. These effects are considered along with the environmental baseline and the predicted cumulative effects to determine the overall effects to the species for purposes of preparing a biological opinion on the proposed action. [50 CFR 402.02]

ENDANGERED SPECIES - Any species which is in danger of extinction throughout all or a significant portion of its range [ESA 3(6)]

ENDANGERED SPECIES ACT - The Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*

ENVIRONMENTAL BASELINE – The past and present impacts of all Federal, State, or private actions and other human activities in an action areas; the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early Section 7 consultation; and the impact of State or private actions that are contemporaneous with the consultation process. [50 CFR 402.02]

EPIBENTHIC – Organisms living on the surface of bottom sediments in a stream, lake or marine/estuarine areas.

ESA – See Endangered Species Act

ESU – See Ecologically Significant Unit

FISH HABITAT – The aquatic environment and the immediately surrounding terrestrial environment that, combined, afford the necessary biological and physical support systems required by fish species during various life history stages.

FLOODPLAIN – Any flat, or nearly flat lowland that borders a stream and is covered by water at the 100-year flood stage or less. [Meehan, 1991] Mapping of floodplains for stream systems are available from the Federal Emergency Management Agency (FEMA) and local jurisdictions.

FORAGE FISH / FORAGE SPECIES – As used in this document, these are generic terms for all of those fish species that as adults are small enough that salmonids may prey upon, particularly in the estuarine or marine environment. The primary forage fish in estuarine or marine areas include herring, surf smelt, and sand lance. (Also known by the term “bait fish.”) (See Spawning Area)

FORAGING AREA – Foraging area is an area of a stream, lake or marine/estuarine areas that is a primary feeding area for salmonids or their prey species.

FORMAL CONSULTATION – A process between the Services and a Federal agency or applicant that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency’s written request and submittal of a complete initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action (“is not likely to adversely affect” listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.14]

FRY – Stage in salmonid life history when the juvenile has absorbed its yolk sac and leaves the gravel of the redd to swim up into the water column. [Myers, et al. 1991]

GRAVEL – Substrate particle size between 2 and 64 mm (0.08 and 2.5 inches) in diameter.

HIGH FLOW DESIGN DISCHARGE – Stream crossing shall be engineered in order to allow for the 10% exceedance flow (at least 90% of the flow conditions are lower than the 10% exceedance flow). Where streamflow data is not available for the subject stream, the 10% exceedance flow may be determined by extrapolating data from an hydrologically similar basin or by using an appropriate model. [Powell and Saunders, 1998]. Otherwise, the two-year peak flood flow may be used as a surrogate for the 10% exceedance flow. (See LOW FLOW DESIGN DISCHARGE)

HPA – See Hydraulic Project Approval

HYDRAULIC PROJECT APPROVAL (HPA) – This refers to a process and permit specified in the Revised Code of Washington (recently codified as chapter 77.55 RCW).

HYPORHEIC ZONE – The zone around a stream, especially those with gravel beds, in which the water and its microflora and fauna extends as groundwater throughout the surrounding land. [Meehan, 1991]

INCIDENTAL TAKE – Those effects that are caused by or will result from the proposed action and are later in time, but still reasonably certain to occur. [50 CFR 402.02]

INDIRECT EFFECTS – Those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. [50 CFR 402.02]

INDIVIDUAL PERMIT (IP) – A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures outlined in 33 CFR 325 and a determination that the proposed structure or work is in the public interest pursuant 33 CFR 320. [33 CFR 322.2]

INDIVIDUAL PROGRAMMATIC BIOLOGICAL ASSESSMENT (IPBA) – Supplemental information provided for individual projects seeking approval under the programmatic consultation. The IPBA includes the Supplemental Information Form to be completed by the applicant including drawings, photographs, and monitoring plans and the ESA Programmatic Notification to the Services completed by the Corps that states which conservation measures of the programmatic consultation apply to the project. If the Corps makes revisions, additions, or exclusions of programmatic consultation measures on a case-by-case basis, justification for the changes will be provided to the Services and decisions will not be finalized until approval has been granted by the Services.

INDIVIDUAL PROGRAMMATIC BIOLOGICAL OPINION (IPBO) – Authorization from the Services for individual projects seeking approval under the programmatic consultation. If the individual project is approved under the programmatic consultation, the IPBO will refer to the original programmatic biological opinion and include an incidental take statement for that project. The IPBO will also approve or disapprove of any changes to conservation measures proposed by the Corps in the IPBA.

INFORMAL CONSULTATION – An optional process that included all discussions and correspondence between the Services and a Federal agency or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services' expertise to evaluate

the agency's assessment of potential effects or to suggest possible modification to the proposed action, which could avoid potentially adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.13]

**INTERDEPENDENT EFFECTS** – Effects from activities which have no independent utility apart from the action being considered. [50 CFR 402.02]

**INTERRELATED EFFECTS** – Effects from activities that are part of a larger action and depend on the larger action for their justification. [50 CFR 402.02]

**INTERTIDAL VASCULAR PLANTS** – Fleshy plants that grow between the extreme high tide and extreme low tide areas of brackish or saltwater systems. Examples include brass buttons, Lyngby's sedge, pickleweed, Pacific silverweed, salt grass, saltweed (fat hen), and Seaside plantain. [Corps, 1984]

**IP** – See **INDIVIDUAL PERMIT**.

**IPBA** – See **INDIVIDUAL PROGRAMMATIC BIOLOGICAL ASSESSMENT**.

**IPBO** – See **INDIVIDUAL PROGRAMMATIC BIOLOGICAL OPINION**.

**ISOLATED WATERS** – Non-tidal waters of the United States, including adjacent wetlands, that are not part of a surface tributary system to interstate waters or navigable waters of the United States. [33 CFR 330.5(26)(ii)]

**JEOPARDIZE THE CONTINUED EXISTENCE OF** – 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. [50 CFR 402.02]

**KELP** – Large brown alga or seaweed that grows in the intertidal region and are also plentiful below the low-tide line (Phylum *Phaeophyta*). A feature of many kelps is a holdfast consisting of a mass of stuffy rootlike structures. This type of holdfast, looking like something fished out of a jar of mixed pickles, is limited to the brown algae. Float bladders are another distinctive characteristic of many representatives of this group. [Kozloff, 1993]

**LAA** – See **LIKE TO ADVERSELY AFFECT**.

**LARGE WOODY DEBRIS (LWD)** – Sound and rotting logs and stumps that provide habitat for plants, animals and insects and a source of nutrients for soil development. Material generally greater than 8–10 cm in diameter (4-5 inches).

[Biodiversity Guidebook, Ministry of Forest Research Programs, British Columbia, 1998]

LETTER OF PERMISSION (LOP) – Type of individual permit issued in accordance with the abbreviated procedures of 33 CFR 325.2(e). [33 CFR 322.2]

LIKELY TO ADVERSELY AFFECT (LAA) – The appropriate finding in a biological assessment/evaluation if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial. In the event the overall effect of the proposed action is beneficial to the listed species, but is also likely to cause some adverse effects, then the proposed action “is likely to adversely affect” the listed species. If incidental take is anticipated to occur as a result of the proposed action, an “is likely to adversely affect” determination should be made. An “is likely to adversely affect” determination requires the initiation of formal section 7 consultation. [USFWS and NMFS, 1998.]

LISTED SPECIES – Any species of fish, wildlife or plant, which has been determined to be endangered or threatened under section 4 of the Act. [50 CFR 402.02]

LOP – See LETTER OF PERMISSION.

LOW FLOW DESIGN DISCHARGE – Stream crossings shall be engineered to the 95% exceedance flow or the two-year seven-day low flow discharge [WAC 220-110-070]. Where streamflow data for the subject stream is not available, the 95% exceedance flow may be determined by extrapolating data from an hydrologically similar basin or by using an appropriate model. The low flow design discharge shall be used to determine the depth of water in the new structure during low flow periods. (See HIGH FLOW DESIGN DISCHARGE)

LWD – See LARGE WOODY DEBRIS.

MACROALGAE – Algae (red, brown or green) where each plant is large enough to distinguish with the naked eye, usually referring to algae that grows in estuarine or marine systems. Algae may occur as individual plants in the intertidal or low tide areas such as Kelp or as thin membranes, or thick rubbery sometimes warty sheets that can be found on rocks in the intertidal area. [Kozloff, 1993]

MACROINVERTEBRATE – An invertebrate animal (without backbone) large enough to be seen without magnification. [Kozloff, 1993]

MARINE/ESTUARINE AREAS – Refers to all saltwater areas in Washington State including the Pacific Ocean, Strait of Juan De Fuca, Strait of Georgia,

Puget Sound, Hood Canal, Grays Harbor, and Willapa Bay. It also includes the mouth of the Columbia River (Baker Bay) unless otherwise stated. [Dethier, 1990]

**MEAN HIGH WATER (MHW) MARK**– As used by the Corps of Engineers, and as used in this document, this term refers to the elevation on the shore of tidal waters (ocean waters, bays, estuaries, and certain rivers) “reached by the plane of the mean (average) high water. Where precise location of the actual line becomes necessary, it must be established by survey with reference to the available tidal datum, preferably averaged over a period of 18.6 years.” [33 CFR 329.12(a)(2)] There are set tide gauges throughout Washington State. The MHW for these tide gauges may be obtained by contacting the Corps or checking the following website: <http://www.nws.usace.army.mil/hh/tides/tides.htm>.

**MEAN HIGHER HIGH WATER (MHHW) MARK** – As used by the Corps of Engineers, and as used in this document, this term correlates to OHW in estuarine or marine areas. MHHW refers to tidal waters (ocean waters, bays, estuaries, and certain rivers) on the West Coast of the U.S. where there are two high tides, and indicates the elevation of the highest of these tides (averaged as above under MHW). There are set tide gauges throughout Washington State. The MHHW for these tide gauges may be obtained by contacting the Corps or checking the following website: <http://www.nws.usace.army.mil/hh/tides/tides.htm>.

**MIGRATION AREAS** - The aquatic areas where juvenile, subadult, or adult salmonids may be found moving and/or staging at certain times as they carry out their anadromous life cycle. The locations and times will vary by species and life stage (including ESUs and DPSs).

**MINIMIZATION** – “Minimization” refers to the second step of “mitigation sequencing” - Minimizing impacts to the resource of concern by limiting the degree or magnitude of the action and its implementation. This may include but is not limited to changing project location, design, or construction methods. [40 CFR 1508.20(b). (See AVOIDANCE, MITIGATION, and SEQUENCING.)

**MITIGATION** – As used in this document “mitigation” refers to “compensatory mitigation”. “Compensatory mitigation” is the final step within “mitigation sequencing” that occurs only after impacts to the resource of concern have been avoided and minimized to the full extent practicable. All remaining impacts to the resource of concern are considered “unavoidable”. “Compensatory mitigation” includes creation, restoration, and/or preservation of the resource of concern. Creation being compensating for the impact by replacing or providing substitute resources or environments. Restoration being rectifying the impact by repairing, rehabilitating, or restoring the affected environment. Preservation being reducing or eliminating the impact over time by preservation and maintenance operations

during the life of the action. [40 CFR 1508.20(c)(d) and (e)] (See AVOIDANCE, MINIMIZATION, and SEQUENCING).

MODEL TOXIC CLEANUP ACT SITE – A project site designated for clean up of hazardous materials in accordance with clean-up orders from the Washington State Department of Ecology under the State of Washington Model Toxic Cleanup Act.

MONITORING – As used in this document, monitoring is (1) regular evaluation of the establishment/stability of a specific site (usually a mitigation or revegetation area) [See Individual Project Monitoring discussion] and (2) the regular evaluation of the use the programmatic consultation [See Programmatic Tracking and Reporting discussion].

MUD FLATS – Mud flats are one of 6 “special aquatic sites”. Mud flats are broad flat areas along the coast and in coastal streams to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may re-suspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats. [40 CFR 230.42(a)] (See SPECIAL AQUATIC SITES)

NATIONWIDE PERMIT (NWP) – A nationwide permit is a form of general permit which may authorize activities throughout the nation. Nationwide permits are designed to allow certain activities to occur with little, if any, delay or paperwork. Nationwide permits are valid only if the conditions applicable to the nationwide permits are met. Failure to comply with a condition does not necessarily mean the activity cannot be authorized but rather that the activity can only be authorized by an individual or regional permit. Nationwide permits can be issued to satisfy the requirements of section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and/or section 103 of the Marine Protection, Research and Sanctuaries Act. [33 CFR 330.1]

NATURAL BEACH COMPLEXITY FEATURES – Features, such as large woody debris or rocks, that naturally occur on the beach in freshwater, estuarine and marine areas, providing refuge and habitat for salmonids and other species.

NEARSHORE – Referring to the area in marine/estuarine waters extending from the extreme high tide to the shallow subtidal area (a depth of 20 feet at MLLW). [Dethier, 1990]

NERITIC ZONE – Pertaining to the waters and deposits of a shoreline. [Kozloff, 1993]

NLAA – See NOT LIKELY TO ADVERSELY AFFECT.

NMFS – The National Marine Fisheries Service.

NO EFFECT – The appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat, either adversely or beneficially. [USFWS and NMFS, 1998]

NOT LIKELY TO ADVERSELY AFFECT (NLAA)– The appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. [USFWS and NMFS, 1998.]

NWP – See NATIONWIDE PERMIT

NWP NATIONAL CONDITIONS – See 33 CFR Part 330, Appendix A, Section C. Also included in this document as Appendix E.

NWP REGIONAL CONDITIONS – See Special Public Notice dated 5 March 1997, revised 14 October 1998. Also included in this document as Appendix E.

OHW – See ORDINARY HIGH WATER MARK.

ORDINARY HIGH WATER (OHW) MARK– As used by the Corps of Engineers, and as used in this document, this term refers to the line on the shore of non-tidal streams and lakes “established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.” It is the line of jurisdiction in freshwaters for the Corps of Engineers regulatory program. For tidally influenced waterbodies, OHW correlates to the line of Mean Higher High Water (MHHW). [33 CFR 329.11(a)(1)] (See MEAN HIGHER HIGH WATER MARK)

PARTIAL PASSAGE BARRIERS – Instream structures or debris accumulation that blocks use of the upper watershed for smaller or weaker fish in an anadromous fish population, thus limiting the genetic diversity that is essential for a robust population. [WDFW, 1999] (See COMPLETE PASSAGE BARRIERS and TEMPORAL PASSAGE BARRIERS)

PEA GRAVEL – As used in this document, this is gravel which is clean and round, not crushed (and not coarse sand). Pea gravel may be no smaller than

1/16 of an inch in diameter and no larger than ¼ of an inch in diameter. At least 80 percent of the gravel sized between 1/16 of an inch and ¼ of an inch in diameter. The other 20 percent may exceed ¼ of an inch but not to exceed 3/8 of an inch in diameter. [WAC 220-110]

POPULATION – See DISTINCT POPULATION SEGMENT.

PREDATOR – A species which habitually preys upon others (i.e., raptor). In this document, predator relates specifically to species that prey on listed fish species.

PREY SPECIES – A species that is a food source for others. In this document, prey species relates specifically to species that are a primary food source for listed fish species, including but not limited to forage fish, terrestrial insects, aquatic insects, and epibenthic invertebrates.

PROGRAMMATIC CONSULTATION – Consultation addressing an agency's multiple actions on a program, regional or other basis.

PROPOSED SPECIES – Any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under Section 4 of the Act. [50 CFR 402.02]

REARING AREA – Areas in streams, lakes or estuaries where juvenile salmon and trout find food and shelter to live and grow, from fry to smolts, preparing for ocean migration. Varying from species, ESU and DPS, fry may immediately enter an estuary and remain there until they are smolts or may stay for varying periods of time in lakes or streams during the outmigration to the ocean. Information on whether a specific location is a rearing area can be obtained from the Corps of Engineers or WDFW.

REDD – Nest made in gravel, consisting of a depression hydraulically dug by a fish for egg deposition (and then filled) and associated gravel mounds. [Myers, et al. 1998]

REGIONAL PERMIT (RGP) – Regional permits are a form of general permits that are issued on an nationwide or regional basis for a category or categories of activities when: (1) Those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or (2) The general permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, State, or local agency provided it has been determined that the environment consequences of the action are individually and cumulatively minimal. [33 CFR 322.2(f) and 33 CFR 323.2(n)]

REHABILITATION – An activity whose primary purpose is to create or enhance functions or processes limited or lacking within the natural aquatic, riparian or wetland habitat.

**RESTORATION** – An activity whose primary purpose is to return a natural aquatic, riparian or wetland habitat to its properly functioning condition.

**REVEGETATION** – As used in this document and by the Corps, upon completion of the work in a wetland or riparian area (freshwater, estuarine or marine), the site shall be replanted with native vegetation during the next appropriate planting season. Removal or destruction of existing wetland or riparian (freshwater, estuarine and marine areas) vegetation shall be held to the absolute minimum needed for construction. Immediately following construction, riparian zones affected by the construction shall be replanted with native vegetation. The applicant shall take appropriate measures to ensure revegetation success. Monitoring and reporting requirements for riparian areas only (freshwater, estuarine and marine) are outlined in “Individual Project Monitoring” discussion. [Corps, 1997. General Conditions for Nationwide Permits, General Condition 3. Revegetation]

**RIFFLE AND POOL COMPLEXES** – Riffle and pool complexes are one of 6 “special aquatic sites”. Steep gradient sections of streams are sometimes characterized by riffle and pool complexes. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a steaming flow, a smooth surface, and a finer substrate. Riffle and pool complexes are particularly valuable habitat for fish and wildlife. [40 CFR 230.45(a) Subpart E]

**RIPARIAN** – Pertaining to anything connected with or immediately adjacent to (within 300 feet) the banks of a stream or other body of water. Riparian refers to the upland and wetland bank or shoreline of freshwater, estuarine and marine systems. (See WOODY RIPARIAN VEGETATION)

**RIPARIAN AREA** – The wetland or upland area directly adjacent to (within 300 feet) of a stream or other body of water (freshwater, estuarine, and marine).

**RIP RAP** – A layer of large, durable materials (usually rock) used to protect a bank from erosion. The material averages 4- to 5-feet in diameter.

**SALMONID** – For this document, “salmonid” means all those salmonid fishes occurring in, and native to, Pacific Ocean drainages of the United States – including steelhead trout, bull trout and anadromous forms of cutthroat and salmon, and not including salmonids occurring in the Atlantic Ocean and Great Lakes drainages. [Myers, et al. 1998]

**SALT MARSH** – Any area adjacent to salt water where the interstitial soil salinity is greater than or equal to 0.5 parts per thousand at any time of year or where the plant community is comprised of at least 5% total cover of any of the

hydrophytic plants characteristic of salt marshes. For a list of the plant species see the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, Special Public Notice on Nationwide Permits, dated February 22, 1997. [Corps, 1984]

**SANCTUARIES AND REFUGES** – Sanctuaries and refuges are one of 6 “special aquatic sites”, consisting of areas designated under State and Federal laws or local ordinances to be managed principally for the preservation and use of fish and wildlife resources. [40 CFR 230.40(a) Subpart E] (See SPECIAL AQUATIC SITES)

**SECTION 4** – The section of the Endangered Species Act of 1973, as amended, outlining procedures and criteria for: (1) identifying and listing threatened and endangered species; (2) identifying, designating, and revising critical habitat; (3) developing and revising recovery plans; and (4) monitoring species removed from the list of threatened or endangered species. [ESA 4]

**SECTION 7** – The section of the Endangered Species Act of 1973, as amended, outlining procedures for interagency cooperation to conserve Federally listed species and designated critical habitats. [ESA 7]

**SEDIMENT** –Particles derived from rocks or biological materials that are or have been transported by water. [Meehan, 1991.]

**SEDIMENTATION** – Deposition of material suspended in water or air, usually when the velocity of the transporting medium drops below the level at which material can be supported. Deposition of sediment may be via five processes: weathering, erosion, transportation, deposition, and/or diagenesis (consolidation into rock). [Meehan, 1991.]

**SELF-REGULATED TIDE GATE** – A tide gate with a mechanical design that allows for the opening and closing of the gate to be controlled by a float system. Self-regulated tide gates may be set for specific tidal elevations, thereby allowing a greater amount of tidal inundation over a longer period of time than the traditional flap tide gate. (See TIDE GATE)

**SEQUENCING** – As used in this document, “sequencing” refers to “mitigation sequencing”. The process of reducing impacts to the resource of concern by first - avoiding the impacts to the full extent practicable, second - minimizing the impacts to the resource of concern the full extent practicable, and lastly mitigating for the “unavoidable” impacts to the resource of concern by creating, restoring and/or preserving the lost resource. [33 CFR 320.4[r] and 40 CFR 1508.20]. (See AVOIDANCE, MINIMIZATION, and MITIGATION)

**SERVICE(S)** - In this document, this term refers to the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (or both).

**SINGLE AND COMPLETE PROJECT** – The total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For linear projects, the “single and complete project” (i.e. single and complete crossing) will apply to each crossing of a separate water of the United States (i.e. single waterbody) at that location; except that for linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies. [33 CFR 330.2(i)].

**SLOPES** – “Standard Local Operating Procedures for Endangered Species,” a term used by the U.S. Army Corps of Engineers to refer to the local protocols that various Corps districts use in conducting ESA consultations with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

**SLURRY** - A thin mixture of bentonite and the insoluble materials through which the drill hole is bored.

**SMOLT** – (1) (verb) the physiological process that prepares a juvenile anadromous fish to survive the transition from fresh water to salt water. (2) (noun) a juvenile anadromous fish that has smolted. [Myers, et al. 1998]

**SPAWNING AREA** – These are substrates into and upon which aquatic species will lay their eggs. Salmonid spawning areas vary by species, ESU, or DPS. Typically, salmon species eggs require 30 to 90 days of incubation. Salmon species alevin typically remain in the gravel for 30 to 150 days, emerging as fry in the spring or summer months. Total time in the gravel is typically 60 to 240 days. Bull trout eggs require a minimum of 200 days of incubation. Bull trout fry have been found to stay in gravel for 3 weeks after emergence, for a total time in gravel of 221 days. Known areas are identified by species in the WDFW StreamNet database. Forage fish spawning areas are identified in the Washington State Department of Fish and Wildlife’s 1995 “Puget Sound Intertidal Baitfish Spawning Beach Survey Project” document.

**SPECIAL AQUATIC SITES** – “Special Aquatic Sites” means those sites identified in Subpart E of the Environmental Protection Agency’s Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Section 404(b)(1) Guidelines) and include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. [40 CFR 230.3(q-1) and 40 CFR 230.10(a)(3)]

(See MUD FLATS, RIFFLE AND POOL COMPLEXES, SANCTUARIES AND REFUGES, VEGETATED SHALLOWS and WETLANDS).

**SPECIES** – Includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature. [ESA 3(16)]

**STAGING** – The storage and operation area for construction equipment and material.

**STREAM** – (includes creeks and rivers) A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. [Meehan, 1991]

**SUBSTRATE** – The mineral and/or organic material that forms the bed of the stream, lake or marine/estuarine areas. [Meehan, 1991]

**SUPERFUND SITE** – A specific project site designated for clean up of hazardous materials and under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as ordered and administered by the U.S. Environmental Protection Agency (EPA).

**TAKE** - To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA 3(19)] Harm is further defined by FWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR 17.3]

**TEMPORAL PASSAGE BARRIERS** – Instream structures or accumulated debris that blocks migration of anadromous fish into the upper watershed during some portion of the migration period and may result in loss of production by delay (anadromous salmonids survive a limited amount of time in freshwater and a delay can cause mortality or limit distribution). [WDFW, 1999] (See COMPLETE PASSAGE BARRIERS, and PARTIAL PASSAGE BARRIERS)

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

TIDAL WETLANDS – Marshes and wetlands adjacent to (bordering and contiguous) tidal waterbodies and the hydrology of the wetland or marsh is directly influenced by the tides. (See also WETLANDS.) [Corps, 1984]

TIDE GATE – Structures attached to culverts through levees or other types of berms flowing into tidal waterbodies for the purpose of controlling tidal inundation on the landward side of the structure. In some cases, gates may be installed in non-tidal areas to prevent flooding during high flow events. Typically, tide gates consist of a flap hinged to the culvert outlet. (See SELF-REGULATED TIDE GATE).

TURBIDITY – An expression of the optical properties of a sample which causes light rays to be scattered and absorbed rather than transmitted in straight lines throughout the sample. Turbidity of water is caused by the presence of suspended and dissolved matter such as clay, silt, finely divided organic matter, plankton, other microscopic organisms, organic acids and dyes. [Meehan, 1991]

UPLAND – As used in this document, any area that does not qualify as a wetland because the associated hydrologic regime is not sufficiently wet to elicit development of vegetation, soils, and/or hydrologic characteristics associated with wetlands. [Corps, 1987]

USFWS – United States Fish and Wildlife Service

UTILITY LINES – A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquefiable, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication. The term “utility line” does not include activities which drain a water of the United States, such as drainage tile; however, it does apply to pipes conveying drainage from another area. [33 CFR 330 Appendix B (12)]

VEGETATED SHALLOW - Vegetated shallows are one of 6 “special aquatic sites”. Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass, eelgrass, kelp, other macroalgae, and intertidal vascular plants in estuarine and marine systems as well as a number of freshwater species in streams and lakes. [40 CFR 230.43(a) Subpart E] (See SPECIAL AQUATIC SITES)

WATERSHED – See Drainage Area.

WDFW – Washington State Department of Fish and Wildlife.

WETLANDS – Wetlands are one of 6 “special aquatic sites”. “Wetlands” means 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 soils conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. [33 CFR 328.3(b) and 40 CFR 230.41(a)(1)] (See SPECIAL AQUATIC SITES)

**WOODY RIPARIAN VEGETATION** – As used in this document, woody riparian vegetation is any vegetation along (within 300 feet) the shoreline of a lake, stream or marine/estuarine areas that has a lignous or wood tissue, including small saplings or twigs. (See RIPARIAN). [Meehan, 1991]

**WORK DONE BY HAND** – The use of only hand equipment (wheel barrows, hand trucks, and shovels) will be used for the construction; no heavy equipment will run on the beach or streambed; no barges or vessels will be used for construction or to bring in construction material. All access is limited to an existing upland access point.