Global Change

"Fish" is changed to "fish life" unless the language is specific to finfish. (Environmental Coalition)

"Fish and shellfish" is changed to "fish life". (Environmental Coalition)

"Fish habitat" is changed to "fish life habitat". Fish life habitat is defined. This definition is the same as the CR-102 definition for "fish habitat". (Environmental Coalition)

"Eelgrass/macroalgae habitat survey" is changed to "seagrass/macroalgae habitat survey". (Environmental coalition)

"Fish and shellfish and their habitats" is changed to "fish life and the habitat that supports fish life populations." (WDFW)

Add the Following to Section 030 Definitions

030(20) "Channel bed width" means the width of the bankfull channel, although bankfull may not be well defined in some channels. For those streams which are non-alluvial or do not have floodplains, the channel width must be determined using features that do not depend on a floodplain. (WFPA)

030(106) "No-net-loss" means:

- (a) Avoidance or mitigation of adverse impacts to fish life; or
- (b) Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or
- (c) Avoidance or mitigation of loss of area by habitat type.

Mitigation to achieve no-net-loss should benefit those organisms being impacted. (WDFW)

Amend the Following Definitions in Section 030 Definitions

(030)(30) "Critical food fish or shellfish habitats" means those habitats that are essential to fish life. These habitats include habitats of special concern listed in WAC 220-660-120 and 220-660-330 and habitats for priority fish and shellfish.

(030)(51)" Fish fife habitat" means habitat, which is used by fish life at any life stage at any time of the year including potential habitat likely to be used by fish life, which could reasonably be recovered by restoration or management and includes off-channel habitat. (Environmental Coalition)

030(61)(62) "Freshwater area" means those state waters and associated beds below (waterward of) the ordinary high water line that are upstream of stream and river mouths. "Freshwater areas" also include all lakes, ponds, and tributary streams and surface-water-connected wetlands that provide or maintain fish habitat. This definition does not include irrigation ditches, canals, stormwater treatment and conveyance systems, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans. (Counties)

030(116)(118)"Protection of fish life" means avoiding, and minimizing and compensating for unavoidable impacts to fish life and fish the habitat that supports fish life populations through mitigation sequencing. (Environmental Coalition)

030(128) (130) "Saltwater area" means those state waters with salinity as high as 35 parts per thousand of dissolved salts. It includes the associated beds below (waterward of) the ordinary high water line. Saltwater areas include estuaries and other surface water connected wetlands that provide or maintain fish habitat. Salinity in estuaries may range from 0.5 to 30 parts per thousand of dissolved salts. This definition does not include irrigation ditches, canals, stormwater treatment and conveyance systems, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans. (Counties)

030(149) (151) "Watercourse", "river" or "stream" means any portion of a stream or river channel, bed, bank, or bottom waterward (waterward of) of the ordinary high water line of waters of the state. "Watercourse" also means areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks that influence the quality of fish habitat downstream. "Watercourse" also means waters that flow intermittently or that fluctuates in level during the year, and the term applies to the entire bed of such waters whether or not the water is at peak level. A "watercourse" includes all surface-water-connected wetlands that provide or maintain fish habitat. This definition does not include irrigation ditches, canals, stormwater treatment and conveyance systems, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans. (WDFW)

Amendment to Section 050 Procedures - Hydraulic project approvals

050(2) Fish life concerns: Construction and other work activities in or near waterbodies can kill or injure fish <u>life</u> or shellfish directly and can damage or destroy their habitat that supports fish life populations. Damaged or destroyed habitat can continue to cause lost fish life production of fish and shellfish for as long as the habitat remains altered. HPAs help ensure reduce the impacts of construction and other work is done in a way that protects fish life. to fish, shellfish, and their habitat. (WDFW)

050(3)(a) The department issues a standard HPA when a hydraulic project does not qualify for an emergency, imminent danger, chronic danger, expedited or pamphlet HPA. An <u>individual regular</u> standard HPA is limited to a single project site. <u>Special types of standard HPAs may cover multiple project sites.</u> (Environmental Coalition)

050(3)(b)(iii)(C) The general HPA will include a requirement that notice be given to the department before scheduled maintenance or other activities utilizing heavy equipment begin. The department may waive this requirement if the permittee and department meet annually to review scheduled activities for the upcoming year. (WDFW)

Amendments to Section 080 Mitigation requirements for hydraulic projects

080(3)(c) All work subject to this chapter must achieve no net loss through a sequence of mitigation actions. (Tribes)

080(4)(b) When compensatory mitigation is needed to offset impacts, the department prefers compensatory mitigation actions that restore impacted functions on-site or immediately adjacent to the impact site. If mitigation actions on-site or at an adjacent site cannot mitigate the project impacts, then the department prefers mitigation actions at another location benefit the same habitat types and same fish life populations as those impacted by the project. (Tribes)

080(4)(c) The department may not limit the scope of compensatory mitigation options to areas on or near the project site, or to habitat types that are same type as those on the project site. The department must fully review and give due consideration to compensatory mitigation proposals that improve overall habitat functions and values of in the watershed for the affected fish life populations at the project site. At the request of the project proponent, the department must also accommodate the mitigation needs of the infrastructure or non-infrastructure development, including proposals or portions of proposals that are explored or developed in RCW 90.74.040. However, the Department will not approve compensatory mitigation that does not provide equal or better fish life habitat functions and values. (Tribes and Environmental Coalition)

080(4)(d) The department will evaluate mitigation credits and debits on a scientifically valid measure of fish life habitat function, value, and quantity such as the habitat equivalency analysis, habitat evaluation procedure or other method acceptable to the department. Compensatory mitigation must compensate for temporal losses, uncertainty of performance, loss of habitat quantity and differences in habitat functions, types, and value. (Tribes)

080(4)(e) The department will consider the use of credits from an approved programmatic option such as a state or federal certified fish conservation bank, a joint 404/401 mitigation and fish conservation bank, or in-lieu fee program as a form of compensation only after the standard mitigation sequencing has been applied at the impact site. These credits should benefit the same fish life species or populations stocks or fish life species as those impacted by the hydraulic project. (Tribes)

080(4)(f) For calculating compensatory mitigation requirements under this chapter, the environmental baseline is habitat conditions at the time the HPA application is submitted. However, this baseline does not apply to hydraulic projects illegally constructed. Illegally constructed does not include structures that predate the hydraulic code or structures that were previously authorized under past versions of the hydraulic code. (WSDOT)

080(5)(a) The department may require a mitigation plan for projects with unavoidable adverse impacts and those with ongoing, complex, and experimental mitigation actions. (Ports)

080(5)(d)(i) The relative value of the mitigation for the target fish <u>life</u> species or stocks <u>populations</u>, in terms of the function, value, and quantity of habitat; (Tribes)

080(5)(d)(ii) The compatibility of the proposal with broader resource management and habitat management objectives and plans, such as existing resource management plans, species recovery plans and associated habitat restoration strategies, watershed plans, critical areas ordinances, the forestry riparian easement program, the riparian open space program, the family forest fish passage program, and shoreline master programs; (Tribes)

080(5)(d)(vi) The significance of any negative impacts to non-target fish life species and populations stocks, or resources. (Tribes)

Amendments to Section 100 Freshwater habitat of special concern

100(1)(a) There are ninety-one species of fish in Washington: Fifty species of native fish and forty-one introduced fish species. Freshwater habitats of special concern are listed in WAC 220-660-120 and 220-660-330, and include priority habitats in the priority habitats and species program. These Freshwater habitats of special concern provide essential functions important in the developmental life histories of twenty-two priority fish species. Priority fish species include species that are listed under state and federal endangered species laws, and species of recreational, commercial, or tribal importance. (WDFW)

Amendment to Section 110 Authorized work times in freshwater areas

110(1) The department authorizes work during less critical times of the year to reduce the risk of impacts to fish life at <u>critical certain</u> life stages. In-water work is not allowed during critical periods of the year unless a person can implement mitigation measures to eliminate risk to fish life. (WDFW)

Amendment to Section 120 Common freshwater construction provisions

120(4)(d) Limit the removal of native vegetation to one side of the channel to maintain the best shade coverage. Where possible, locate the project access site to minimize the need to remove woody vegetation. Woody vegetation greater than <u>four</u> <u>six</u> inches diameter that must be removed must be marked in the field by the applicant and specifically approved for removal by the department. (Tribes)

120(5)(e) Equipment used in or near water must use vegetable-based lubricants. <u>The department may waive this requirement for a small project that has minimal use of equipment in or near the water provided the duration project is forty-hours or less. (WSDOT)</u>

120(12) (f) The department will require all person(s) removing fish from a job site to follow an approved protocol. An approved protocol is available on the department website or a person may submit another protocol with their application. The department will approve the alternate protocol if it provides equal or better fish protection. The protocol will be authorized by the department in the HPA. (Tribes)

120(13)(j) The department must approve <u>species composition</u>, planting densities and maintenance requirements for replanting on a site-specific basis. (Tribes)

Amendments to Section 130 Stream bank protection and lake shoreline stabilization

WAC 220-660-130 Stream bank protection and lake shoreline stabilization. Appropriate Suitable methods to design stream bank structures identify and select an appropriate streambank protection technique are available in the department's Integrated Streambank Protection Guidelines, as well as other published manuals and guidelines. (Tribes)

130(3)(a) The department may require a person to submit a qualified professional's rationale with the HPA application for a new structure or a replacement structure extending waterward of the existing structure or bankline. This requirement does not apply to projects that address <u>localized_constriction</u> and drop/weir scour. The rationale for the proposed technique must include: (Tribes and WSDOT)

Amendment to Section 140 Residential and public recreational docks, piers, ramps, floats, watercraft lifts, and buoys in freshwater areas.

140(1) Docks are structures that are fixed to the shoreline but floating upon the water. Piers are fixed, pile-supported structures. Floats (rafts) are floating structures that are moored, anchored, or otherwise secured in the water that are not directly connected to the shoreline. A ramp is a gangway that connects a pier or shoreline to a float and provides access between the two. Pilings that are usually associated with these structures are timber, steel, reinforced concrete, or composite posts that are driven, jacked, or cast vertically into the bed. A watercraft lift is a structure that lifts boats and personal watercraft out of the water. A mooring buoy is a structure floating on the surface of the water that is used for private and commercial vessel moorage. (WDFW)

Amendment to Section 170 Dredging in freshwater areas

170(3)(c) The department may require a pre-project channel survey or assessment by a qualified professional to determine the root causes of a sediment deposition problem and the potential channel changes that may result from dredging. This provision does not apply to maintenance dredging of navigational channels and berthing areas and boat ramp and boat launch approaches. (Ports)

Amendment to Section 180 Sand and gravel removal

180(3)(a) Limit sand and gravel removal to exposed bars. Sand and gravel removal must not result in lowering the average channel cross-section profile either in the work area or downstream of it. The department may authorize removing additional sand and gravel, including from wetted portions of the channel, when the project is an integral part of a department-approved comprehensive flood control plan. (Tribes)

Amendments to Section 190 Water Crossings

WAC 220-660-190 Water crossing structures. Appropriate methods to design water crossing structures are available in the department's Water Crossing Design Guidelines, or other published manuals and guidelines. A list of approved manuals and guidelines is on the department's website. (WSDOT)

This section applies only to water crossings over fish-bearing waters. Crossings on streams with no fish must be designed to pass the 100-year recurrence interval flood flow, wood, and sediment expected in the stream reach to reduce the risk of catastrophic failure of the crossing. Water crossing structures on non-fish streams in the forest environment designed to pass the 100-year flood flow with debris likely to be encountered meet this standard. (WSDOT and WFPA)

An HPA is required for all construction or repair/replacement of any structure that crosses a stream, river, or other water body regardless of the location of the proposed work relative to the OHWL of state waters. An HPA is also required for bridge painting and other maintenance where there is potential for paint, sandblasting material, sediments, or bridge parts to fall into the water. An HPA is not required for utility crossings attached to bridge structures. (WDFW)

190(1) Description: Water crossings are structures constructed to facilitate the movement of people, animals, or materials across or over rivers and other bodies of water. These structures include bridges, culverts, fords, and conduits. This chapter section covers bridges, culverts, and fords.; WAC 220-660-270 covers conduits. Generally, people use bridges to cross over larger streams and rivers, or over unstable channels; they use culverts to cross over smaller streams and they use fords when other stream crossing options would result in a greater impact to fish life and the their habitat that supports fish life populations. (WDFW)

190(2) (a) A person must design water crossing structures in fish-bearing streams to allow fish to move freely through them at all flows when fish are expected to move. All water crossings must retain upstream and downstream connection in order to maintain expected channel processes. These processes include the movement and distribution of wood and sediment and the shifting of channel patterns. Water crossings that are too small in relation to the stream can block or alter these processes, although some encroachment of the floodplain and channel migration zone will be allowed when it can be shown that such encroachment has minimal impacts to fish life and the their habitat that supports fish life populations. (WDFW)

190(3)(b) The water crossing design must ensure that upstream and downstream channel processes and functions commonly associated with the type of channel found at the site are unconstrained by the structure so they do not cause discernible impacts to fish life. The water crossing structure must be designed to avoid and minimize measurable impacts to the expected channel functions and processes found at the site, or mitigate for impacts to them. The department will make an exception where there are human-made features in the floodplain that are outside the control of the applicant and they are unlikely to be removed. By complying with the provisions under subsections (4) and (6) of this section, the applicant is assumed to provide these processes and functions. (WSDOT)

190(3)(c)(i) Similar slope: The slope should be that of a stable (equilibrium) channel and not oversteepened that would fit within the geomorphic context of the reach. (WSDOT)

190(3)(d) A person may propose an one of the following alternative crossing design methods instead of complying with the provisions under subsections (4) and (6) of this section when the following circumstances exist: (WSDOT)

190(3) (c) A bridge over a watercourse with an active floodplain must be designed have a span wide enough to prevent a significant increase in the main channel average velocity (a measure of encroachment) The bridge is defined as the main bridge span(s) plus floodplain relief structures and approach road overtopping. This velocity must be determined at the 100-year flood flow or the design flood flow approved by the department. The significance threshold should be determined by considering bed coarsening, scour, backwater, floodplain flow, and related biological and geomorphological effects typically evaluated in a reach analysis.

190(4)(d) A person must design (size) the bridge to account for the lateral migration expected to occur during the bridge's lifespan to minimize the need for bank armoring. The department will may approve encroachment into the channel migration zone expected pathway of lateral migration if the mitigation sequencing it can be shown to avoid or minimize impacts to fish life and the their habitat that supports fish life populations. (WSDOT)

190(4)(f) The design must have at least three feet of clearance between the bottom of the bridge structure and the water surface at the 100-year peak flow. The department may grant an exception based on or engineering justification provided by the applicant for sufficient clearance that allows for the free passage of anticipated debris. (The calculation of water surface elevation includes the main bridge span(s) plus floodplain relief structures and approach road overtopping) (WSDOT)

190(3)(g) The bridge design must <u>minimize avoid</u>-the need for scour protection. Where mid-channel piers are necessary, design them so no additional scour protection is required. If scour protection is unavoidable, the design must minimize the scour protection to the amount needed to protect piers and abutments. The design must specify the size and placement of the scour protection so it withstands expected peak flows.

190(6)(a)(iii) The stream simulation culvert must be set at the same gradient as the prevailing stream gradient unless engineering justification for an alternative slope is approved by the department. (WFPA)

190(6)(a)(v) The stream simulation culvert must be countersunk a minimum of thirty percent and a maximum of fifty percent of the culvert rise, but not less than two feet. In the case of box and bottomless culverts, depth of culvert fill must be adequate to accommodate Alternative depths of culvert fill may be accepted with engineering justification that considers channel degradation and total scour. (WSDOT)

190(6)(b)(iii)(E)(II) The culvert will fill quickly because of the <u>frequent high</u> rate of sediment transported through the culvert and will not cause excessive cutting or slumping of the upstream channel. (WSDOT)

190(7)(c) Temporary culverts must provide unimpeded fish passage in locations where fish passage concerns exist. The department may approve a temporary culvert that does not meet all fish passage

<u>criteria in site-specific situations</u>. These situations may include streams where there is limited fish movement and presence, and where the use of a temporary culvert will result in lower impacts over the <u>long-term</u>. (WFPA)

190(13) Permanent removal of a W-water crossing (abandonment): (WDFW)

190(13)(a) When removing a W-water crossing removal without replacing it, a person must be compliant comply with the following provisions. In all instances a person must protect the job site from erosion and plant vegetation as necessary to restore the banks and other areas disturbed during construction or removal at the site. (WSDOT)

Amendments to Section 200 Fish passage improvement structures

200(2) Barriers can block fish from using upstream spawning and rearing habitat. The main goal is to remove fish passage barriers and ensure unimpeded passage of fish at all life stages, as well as to maintain natural channel processes and function. However, when it is not possible to remove a barrier, fishways a fish passage improvement structure may be an alternative mitigation measure. The department does not generally recommend using fish passage improvement structures fishways because they can be partial barriers to fish passage and generally require maintenance. Fish passage improvement structures that mainly pass one species or class of fish may unintentionally limit the passage of other species. (WDFW)

200(4)(b) The department may approve the installation of temporary <u>fishways</u> <u>fish passage</u> <u>improvement structures</u> when permanent structures are damaged or are under construction, to conduct maintenance or repair, for enhancement projects, or for seasonal water diversion structures such as irrigation diversion dams. (WDFW)

200(4)(c) Temporary <u>fish passage improvement structures</u> <u>fishways</u> must remain operational for the duration of the temporary obstruction and must be maintained and adjusted as needed to provide efficient passage of fish life. (WDFW)

Amendments to Section 220 Large woody material placement, repositioning and removal in freshwater areas.

220(1) (1) Description: Large woody material (LWM) is trees and tree parts <u>larger than four inches in diameter and longer than six feet or rootwads</u> that enter stream channels mainly from stream bank undercutting, wind throw, and slope failures. Public agencies sometimes reposition or remove large woody material to address a threat to life, the public, or property. Large woody material is also placed in streams to restore or create fish habitat. (Tribes)

220(3)(a) The department will approve the repositioning or removal of large woody material within the watercourse when needed to protect life, the public, property, or when needed to construct or mitigate for a hydraulic project. The department will require a person to place the repositioned or removed wood directly back in the channel unless it is not possible due to geological, engineering or safety

constraints. If large woody material must be removed from the channel, the department will require compensatory mitigation if the wood removal diminishes fish habitat function of or value. (WDFW)

Amendment to Section 270 Utility crossings in freshwater areas

270(1) Utility lines are cables and pipelines that transport gas, telecommunications, fiber optics, power, sewer, oil, and water lines from one side of a watercourse to the other. <u>An HPA is not required for utility crossings attached to bridge structures.</u> (WDFW)

Amendment to Section 280 Felling and yarding of timber

280(1) Timber felling includes "bucking" or cutting the felled tree into short lengths and limbing the felled tree. Yarding is the process of hauling logs from the cutting area to the landing and includes skidding (dragging the logs across the ground). There are three main kinds of yarding systems; ground based, cable, and aerial logging. (WDFW)

Amendment to Section 320 Saltwater habitats of special concern

320(1)(vi) Feeder bluffs that form and maintain forage fish spawning beaches. Geomorphic processes such as sediment delivery and movement that creates and maintains habitat that supports fish life populations. (Environmental Community)

320(3)(b)(x) Macroalgae species Pacific herring use as spawning substrate. (WDFW)

320(4)(a) Hydraulic projects should be located and constructed to avoid impacts to processes that creates and maintains habitats-(geomorphic processes) that supports fish life populations in the nearshore zone. This is because impacts to geomorphic processes are difficult to mitigate.(Environmental Community)

Amendment to Section 330 Authorized work times in saltwater areas

330(3)(b) Tidal Reference Areas 1 through 17; October 15 through May 15 for projects in or adjacent to juvenile lingcod settlement and nursery areas. <u>April 1 through December 31 for pile driving work in or adjacent to lingcod nests.</u> (WDFW)

330(3)(e) Juvenile Salmonid Migration, Feeding and Rearing Areas Tidal Reference 4 - August 1 - February 15 for all work except dredging in all areas except Commencement Bay. September 1 - February 15 for dredging in all areas except Commencement Bay. July 15 – February 15 for all work in Commencement Bay. (Port of Tacoma)

330(3)(f) If the surf smelt spawning season for the project location is six months or longer, the department may permit work outside of the authorized work times if an intertidal forage fish spawning bed survey <u>complies with the followings</u>: (WDFW)

330(3)(f) (i) A department trained biologist, following the depart-ment's departments intertidal forage fish spawning habitat survey protocol per WAC 220-660-370 340, conducts a spawning survey at the worksite; (WDFW)

Amendment to Section 350 Seagrass and macroalgae habitat surveys

350(3)(a)(i) Constructing a new dock, mooring buoy, <u>wharf</u> or other over-water structure; (Environmental Community)

350(3)(a)(iii) New dredging, trenching, filling (e.g. boat ramps and fixed breakwaters), or grading; and... (Environmental Community)

350(3)(c) The department prefers that preliminary seagrass and macroalgae survey are conducted between June 1 and October 1 because the full extent of seagrass and macroalgae distribution can be more accurately mapped. But, preliminary surveys may be conducted at any time during the year. If the preliminary survey shows that the project can be located and built without impacting seagrass or macroalgae, the preliminary survey will meet the needs for mapping the project area. However, if the project footprint potentially impacts existing seagrass or macroalgae beds, the department will require an advanced survey to quantify the extent of impact and document mitigation success. (Environmental community)

Amendments to Section 360 Common saltwater construction provisions

(360)(6)(a) Operate vessels in water deep enough to prevent impacts from grounding and propeller wash to seagrass, and kelp and forage fish spawning beds. (WDFW)

360 (6)(b) Do not deploy anchors or spuds in seagrass, and kelp and forage fish spawning beds. (WDFW)

Amendments to Section 370 Bank protection in saltwater areas

.WAC 220-660-370 Bank protection in saltwater areas. RCW 77.55.141 applies to single-family residence bank protection that will not result in a permanent loss of critical food fish and shellfish habitat. RCW 77.55.021 applies to non-single-family residence bank protection and single-family residence bank protection that does not comply with the criteria in RCW 77.55.141. The department may deny bank protection applications processed under RCW 77.55.021 that do not provide proper protection of fish life. Appropriate methods to design marine bank protection are available in the department's Marine Shoreline Design Guidelines, as well as other published manuals and guidelines. (Environmental community)

370(3)(a) If the OHWL is changed since an existing bank protection structure was built, and OHWL reestablishes landward of a bulkhead protection structure, the department will consider this reestablished OHWL to be the existing OHWL for permitting purposes. If repairs to the existing structure are completed permits are submitted for repairs within three years of the breach, the bank protection structure may be repaired or replaced in the original footprint; (Ports)

370(c)(ii) If <u>construction of</u> a new, <u>replacement</u>, <u>or repaired</u> single-family residence bulkhead <u>or other bank protection project</u> in a saltwater area, <u>or replacement or repair of an existing single family residence bulkhead or other bank protection project waterward of the existing structure</u> will result in the permanent loss of critical food fish or shellfish habitat, the department must instead process the application under RCW 77.55.021. <u>However</u>, the construction of all bulkheads or other bank protection must not result in a permanent loss of surf smelt or Pacific sand lance spawning beds. (WDFW)

370(30(d) An HPA application for <u>a</u> new, <u>replacement</u>, <u>or rehabilitated</u> bulkhead or other bank protection <u>work or the replacement or rehabilitation of a bulkhead or other bank protection structure that extends waterward of the existing structure must include a site assessment, alternatives analysis and design rationale by a qualified professional (such as a coastal geologist, geomorphologist, etc.) for the proposed project and selected technique. The department may grant an exemption depending on the scale and nature of the project. In addition, this requirement does not apply to projects processed under RCW 77.55.141. This report must include: (WDFW)</u>

Amendments to Section 380 Residential and public recreational docks, piers, ramps, floats, watercraft lifts, and buoys in saltwater areas.

<u>380(1)</u> Docks are structures that are fixed to the shoreline but floating upon the water. Piers are fixed, pile-supported structures. Floats (rafts) are floating structures that are moored, anchored, or otherwise secured in the water that are not directly connected to the shoreline. A ramp is a gangway that connects a pier or shoreline to a float and provides access between the two. Pilings that are usually associated with these structures are timber, steel, reinforced concrete, or composite posts that are driven or jacked into the bed. A watercraft lift is a structure that lifts boats and personal watercraft out of the water. A mooring buoy is a structure floating on the surface of the water that is used for private and commercial vessel moorage. (WDFW)

380(3)(b)(iii) The department may will require a eelgrass seagrass/macroalgae habitat survey for all new construction unless the department can determine the project will not impact seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint.

380(3)(b)(iv) If artificial nighttime lighting is used in the project, use low-intensity lights that are located and shielded to prevent light from attracting fish <u>or disrupting fish mitigation behavior</u>, unless there are safety constraints. (Environmental Community)

380(8)(a)(i)(A) A Eelgrass seagrass/macroalgae habitat survey is are not required if an embedment-style mooring anchor is installed. The department will require the diver/installer to locate the anchor so the mooring buoy system will not damage submerged aquatic vegetation seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. (WDFW)

380(8)(a)(i)(B) A Eelgrass seagrass/macroalgae habitat survey is are required if a surface style mooring anchor is installed. The surveys are is needed to ensure the mooring buoy system is installed at a

location where submerged aquatic vegetation seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate will not be damaged. (WDFW)

Amendments to Section 390

390(3)(b) The department may require a <u>eelgrass-seagrass/macroalgae</u> habitat survey for all new ramp or launch construction <u>unless the department can determine the project will not impact seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint.</u>

Amendments to Section 400 Marinas and terminals in saltwater areas

400(3)(c)(i) Locate new marinas and terminals to avoid and minimize impacts to seagrass and kelp. (Environmental community)

400(3)(b) The department will may require a eelgrass seagrass/macroalgae habitat survey for a new construction unless the department can determine the project will not impact seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint. (WDFW)

400(4)(b) Locate and construct new marinas to avoid and minimize adverse impacts to surf smelt and, Pacific sand lance spawning beds, and seagrass, kelp and intertidal vascular plants beds. (Environmental community)

400(4)(c) Locate and construct new marinas to avoid and minimize adverse impacts to kelp and intertidal vascular plants. (Environmental community)

400(4)(h) If artificial nighttime lighting is used in the design, use low-intensity lights that are located and shielded to prevent light from attracting fish <u>or disrupting fish migration behavior</u>, unless there are safety constraints.

400(5) Terminal Design: Locate and construct new terminals to avoid and minimize adverse impacts to saltwater habitats of special concern. (WDFW)

400(7)(a) Operate and anchor vessels and barges so that they do not adversely impact seagrass, <u>kelp</u> and other or macroalgae species used as herring spawning substrate.

Amendments to Section 410 Dredging in saltwater areas

WAC 220-660-410 Dredging in saltwater areas. (1) Description: Dredging includes removing the removal of substrate to improve vessel navigation and to maintain navigation channels. Dredging is also used to cleanup contaminated sediments. (WDFW)

410(3)(b) Design projects to avoid and minimize dredging and expansions that convert intertidal to subtidal habitat. (Ports)

410(3)(d) The department requires a seagrass/macroalgae habitat survey for all new dredging. A survey is not required for maintenance dredging <u>or deepening the channel within</u> their the original dredged footprint. (Ports)

410(3)(e) Dredging must avoid adverse impacts to seagrasses, kelp, <u>and in herring spawning beds other</u> macroalgae used as spawning substrate, intertidal vascular plants, and geoduck tracts.

Amendment to Section 420 Artificial aquatic habitat structures in saltwater

WAC 220-660-420 Artificial aquatic habitat structures in saltwater areas. (1) Description: An artificial aquatic habitat structure is a structure that humans design and place to provide long-term alterations to saltwater bottom habitat. The structure is designed and located to contribute to fish and shellfish management. Examples include a Artificial reefs are one example. (WDFW)

Amendment to Section 430 Outfall and tide and flood gate structures in saltwater areas

430(4)(b) Design and locate outfalls so that the outflow or any associated energy dissipaters do not cause loss of fish and shellfish to avoid and minimize impacts to saltwater habitats of special concern. The department may require that energy be dissipated using one or more of the following methods, or other effective method proposed by a person and approved by the department: (WDFW)

430(4)(e) The department may will require an eelgrass seagrass/macroalgae habitat survey for new construction unless the department can determine the project will not impact seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint. (WDFW)

Amendment to Section 440 Utility crossings in saltwater areas

WAC 220-660-440 Utility crossings in saltwater areas. (1) Description: Utility crossings are cables and pipelines that transport gas, telecommunications, fiber optics, power, sewer, oil, or water underneath waterbodies. An HPA is not required for utility crossings attached to bridge structures. (WDFW)

(4)(b) The department may will require a eelgrass seagrass/macroalgae habitat survey for new construction unless the department can determine the project will not impact seagrass, kelp and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint.

Amendment to Section 450 Test boring in saltwater areas

(450)(3)(c) After geotechnical or sediment information has been logged, seal the bore hole and substrate surface with the appropriate material including bentonite grout, pellets, and/or chips; and

(d)(c) Check drilling equipment daily for leaks and maintain it in good repair to prevent lubricants, grease, and any other deleterious materials from entering state waters. (Ports)