

Summary

Meeting dates: March 7- 8, 2014, Commission Meeting

Agenda item: Update of Chapter 220-110 Hydraulic Code Rules

Presenter(s): Randi Thurston, Protection Division Manager

Background summary:

This briefing will inform the Fish and Wildlife Commission on proposed additions and changes to the hydraulic code rules.

This briefing will cover:

- 1) Changes to 220-110-250 Authorized work times in saltwater areas (220-110-320)
 - 2) Changes to 220-110-300 Saltwater piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings (220-110-370)
 - 3) New section 220-110-420 Outfall and tide and flood gate structures in saltwater areas
 - 4) New section 220-110-440 Boring in saltwater
-

Policy issue(s) you are bringing to the Commission for consideration:

None, briefing only

Public involvement process used and what you learned:

N/A

Action requested:

None, briefing only

Draft motion language:

N/A

Justification for Commission action:

N/A

Communications Plan:

N/A

Form revised 12/5/12

Section Title: WAC 220-110-320 Authorized work times in saltwater areas

Background: The section reflects current fish science.

Summary of New Section or Proposed Changes: Timing has changed for juvenile salmonid, surf smelt and herring protection based on information from the fish program and the results of studies. The new times are included in table 3 below. Regulations for work outside work windows for surf smelt spawning season have been refined. New criteria are added for modifying timing. These criteria will allow WDFW to be more flexible in establishing work windows for specific conditions rather than the current system of standards dates applicable to all waters. Specific changes include:

- Authorized work times for juvenile rockfish nursery and settlement areas, razor clam beds in tidal reference area 14 and herring spawning beds in tidal references areas 15 and 16 are added.
- The authorized work time in juvenile salmonid migration, feeding and rearing areas is decreased by two months in most tidal reference areas.
- Rock sole spawning beds are removed because rock sole research conducted after 1994 determined rock sole don't spawn on intertidal beaches. Rock sole eggs found on beaches wash ashore from other areas.

Public Comments:

Support

In addition to fish closure windows the timeline for marine projects is driven by multiple factors including tides, seasonal low water, expiration of funding, or other permit requirements. This section appears to allow for flexibility regarding fish closure windows based on the anticipated impacts related to a specific project. State Parks supports an approach that allows for as much flexibility as possible while still protecting fish life rather than a rigid "one size fits all" approach to work times.

Concerns

Current WACs direct that work below the Ordinary High Water Line (OHWL) shall be prohibited during certain times of the year to protect fish life and/or spawning activity. While modification to these provisions is currently allowed, the overall directive of the rule is to apply the restriction unless the brief set of provision exemptions established in WAC 220-110-032 is met. The proposed rule language sets a very different baseline, outlining that these provisions may be removed under very ambiguous scenarios, such as what is described as the department interpretation of expected impact, weather conditions and, most troubling, what is listed as simply other circumstances and conditions.

Retain rock sole spawning protections.

The provision to protect habitat which would only be applied to a project if the habitat, species or spawning activity is documented at the site, weakens protection of Puget Sound. Since many productive habitats in Puget Sound are undocumented, they would not be protected under the proposed rules.

All proposed times are more restrictive than existing rules. Existing authorized times should remain in place and if necessary, site specific monitoring applied to determine absence/presence of aquatic life.

Majority of WDFW juvenile salmonid work windows are shy approximately 1-month to 6-weeks than National Marine Fisheries Service (NMFS) work windows (August 15-December 15). There are exceptions with reduced work time associated with dredging, but still short of recommended NMFS windows. These reduced closure windows are similar to that of NMFS Bull trout work windows timing.

Recommend keeping existing timelines but adding additional monitoring services for projects. This will allow work to continue as previous but will monitor where/when aquatic life is entering the project area.

The Port strongly deems that the proposed August 1 through February 15 work window for Commencement Bay is too restrictive based on best available science. The assumption that the industrial waterways of the Port have fish presence proportional to other parts of Commencement Bay and Puget Sound does not constitute best available science. WDFW should anticipate considerable resistance to this change, which could lead to an increase in permit appeals, if these changes are not supported by best available science.

Current Rule Language:

WAC 220-110-300

Saltwater piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings

Piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated mooring projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following technical provisions apply to piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings in saltwater areas. In addition, these projects shall comply with technical provisions and timing restrictions in WAC [220-110-240](#) through [220-110-271](#).

(1) Floats and rafts shall not ground on surf smelt, Pacific herring, Pacific sand lance, and rock sole spawning beds. In all other areas, no more than twenty percent of the float or raft within the beach area shall ground at any time. Those portions of the float or raft that will ground shall be constructed to align parallel to the shore and provide a minimum of eight inches clearance between the beach area and non-grounding portions of the float.

- (2) Floats, rafts, and associated anchoring systems shall be designed and deployed so that the bed is not damaged.
- (3) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid shading of eelgrass (*Zostera spp*).
- (4) Kelp (Order laminariales) and intertidal wetland vascular plants (except noxious weeds) adversely impacted due to construction of piers, docks, floats, rafts, ramps, boathouses, and houseboats shall be replaced using proven methodology.
- (5) Mitigation measures for piers, docks, floats, rafts, ramps, and associated moorings shall include, but are not limited to, restrictions on structure width and/or incorporation of materials that allow adequate light penetration (i.e., grating) for structures located landward of -10.0 feet MLLW.
- (6) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid adverse impacts to Pacific herring spawning beds and rockfish and lingcod settlement and nursery areas.
- (7) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid adverse impacts to juvenile salmonid migration routes and rearing habitats.
- (8) Floatation for the structure shall be fully enclosed and contained to prevent the breakup or loss of the floatation material into the water.
- (9) Boathouses and houseboats and covered moorages shall not be located landward of -10.0 feet MLLW.

Proposed Rule Language:

220-110-320 Authorized work times in saltwater areas

(1) DESCRIPTION

The department applies timing windows to reduce the risk of impacts to fish life at critical life stages. In-water work is allowed during non-critical periods of the year unless the permittee can take mitigation measures to eliminate risk during critical periods. For saltwater areas, the timing windows are based mainly on juvenile salmon, Pacific herring, surf smelt, Pacific sand lance, lingcod, and rockfish habitat in nearshore waters.

(2) FISH LIFE CONCERNS

Work in or near salt waters of the state can harm fish life at various life stages including eggs, juveniles, and spawning adults, as well as the organisms upon which they feed.

Therefore, work must occur when a person can reduce the risk of these harmful effects unless the risk is mitigated.

(3) AUTHORIZED WORK TIMES

- (a) The department must specify authorized work times for hydraulic projects in or near saltwater areas when it issues HPAs. The department may permit work waterward of the OHWL for the following times, areas, and species.
 - (i) Tidal Reference Areas 1 through 17; March 1 through October 15 for projects in or adjacent to documented Pacific sand lance spawning beds.
 - (ii) Tidal Reference Areas 1 through 17; October 15 through May 15 for projects in or adjacent to documented juvenile lingcod settlement and nursery areas.
 - (iii) Tidal Reference Areas 1 through 17; October 1 through January 15 for projects in or adjacent to documented juvenile rockfish settlement and nursery areas.
 - (iv) Tidal Reference Area 14; October 1 through May 15 for projects in or adjacent to documented razor clam beds.
 - (v) Tidal Reference Areas 1 through 17; The authorized times and areas for protection of migrating juvenile salmonid in the nearshore, and surf smelt and Pacific herring spawning beds are listed in the following table:

**Table 3
Authorized times for Protection of Migrating Juvenile Salmonid, Surf Smelt and Pacific Herring Spawning Beds**

AUTHORIZED TIMES			
TIDAL REFERENCE AREA	JUVENILE SALMONID MIGRATION, FEEDING AND REARING AREAS	DOCUMENTED SURF SMELT SPAWNING BEDS	DOCUMENTED HERRING SPAWNING BEDS
1	July 15 – February 15	—	April 1 – January 15
2	July 15 – February 15	April 1 – June 30	April 1 – January 15
3	July 15 – February 15	May 1 – September 30	April 1 – January 15
4	August 1 – February 15 for all work except dredging September 1 – February 15 for dredging	April 15 – September 30	April 15 – January 15

AUTHORIZED TIMES			
5	August 1 – February 15 for all work except dredging September 1 – February 15 for dredging in all areas except Duwamish Waterway October 16 – February 15 for dredging in the Duwamish Waterway upstream of the East and West Waterways	April 1 – August 31 in all areas except Eagle Harbor and Sinclair Inlet In Eagle Harbor and Sinclair Inlet, authorization depends on survey because spawning occurs year-round.	May 1 – January 15
6	July 15 – February 15 for all work except dredging September 1 – February 15 for dredging	April 1 – August 31	—
7	July 15 – February 15 for all work except in Port Susan and dredging in Port Gardner July 15 – February 15 for all work in Port Susan September 15 – February 15 for dredging in Port Gardner	Authorization depends on survey because spawning occurs year-round	April 15 – January 31
8	August 1 – February 15	Authorization depends on survey because spawning occurs year-round	April 15 – January 31
9	August 1 – February 15	Authorization depends on survey because spawning occurs year-round	April 15 – January 31 south of a line running due west from Governor's point June 15 – January 31 north of a line running due west from Governor's point
10	July 15 – February 15 July 15 – January 15 for all work from Tala Point to the Dungeness River September 1 – March 1 San Juan Islands	April 1 – July 31 except in the San Juan Islands where authorization depends on survey, because spawning occurs year-round	May 1 – January 15
11	July 15 – January 15	March 1 – September 15	April 1 – January 15
12	July 15 – January 15	March 1 – August 31	April 15 – February 15
13	July 15 – January 15	February 15 – July 31	April 15 – January 15
14	July 15 – February 15	October 1 – June 30	—
15	July 15 – February 15	—	February 1 – March 31

AUTHORIZED TIMES			
16	July 15 – February 15	—	March 15 – January 31
17	July 15 – February 15	—	March 15 – January 31

- (vi) 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:
 - (A) A department-trained biologist, following the department’s intertidal forage fish spawning habitat survey protocol per WAC 220-110-340, conducts a spawning survey at the work site;
 - (B) The survey shows that no spawning is occurring or has recently occurred;
 - (C) The work starts within seventy-two hours after the work site is surveyed.
- (b) The department may modify the authorized work times for site-specific conditions or project-specific work by considering the following:
 - (i) The expected impact of construction activities, equipment type, and access.
 - (ii) Proposed best management practices, including plans for:
 - (A) Sediment and erosion control containment and management at the work site.
 - (B) Wastewater containment and management at the work site.
 - (C) Riparian, wetland, and aquatic vegetation management at the work site.
 - (iii) Mitigation measures volunteered or imposed upon the project.
 - (iv) Actual or predicted weather or tidal conditions during construction activities.
 - (v) Other circumstances and conditions.

Section Title: WAC 220-110-370 Residential docks, watercraft lifts and buoys in saltwater areas

Background: The section reflects current fish science and technology measures to avoid or minimize adverse modifications to fish and shellfish habitat from overwater structures.

Summary of New Section or Proposed Changes: A new subsection has been added describing the requirements for watercraft lifts and mooring buoys. There are substantive changes to the requirements in this section based on current best practices including: design standards to minimize shading; new length, width, and grating requirements; restrictions on the location of chemicals used for treated wood; additional restrictions on pile driving and other noises; and specifications for removing piles.

Public Comments:

Support

No specific comments received to date.

Concerns

“New structures may be a pier only; pier, ramp, float; or a float only provided.” Site locations may not always provide for these types of structures. You should allow for alternatives based on site needs.

Recommend deleting a specified buffer distance of 25 feet from seagrass and kelp.”

Recommend increasing the buffer distance in all directions from seagrass and kelp to protect habitats and species of concern.

Allow the use of ammoniated copper quat (ACQ). We urge the department to replace ACZA with ACQ as the allowed treatment. This would eliminate the introduction of toxic zinc and arsenic to impacted water bodies.

What is the justification for the design criteria? These should be based on structural and safety needs of a facility, not predefined. What is a “qualified professional”?

The department should adopt similar policy and language to the USACE and should also incorporate provisions related to the height of structures as increased dock height has been found to have less impact on light reduction.

Current Rule Language:

WAC 220-110-300

Saltwater piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings

Piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated mooring projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following technical provisions apply to piers, pilings, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings in saltwater areas. In addition, these projects shall comply with technical provisions and timing restrictions in WAC 220-110-240 through 220-110-271.

(1) Floats and rafts shall not ground on surf smelt, Pacific herring, Pacific sand lance, and rock sole spawning beds. In all other areas, no more than twenty percent of the float or raft within the beach area shall ground at any time. Those portions of the float or raft that will ground shall be constructed to align parallel to the shore and provide a minimum of eight inches clearance between the beach area and non-grounding portions of the float.

(2) Floats, rafts, and associated anchoring systems shall be designed and deployed so that the bed is not damaged.

(3) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid shading of eelgrass (*Zostera* spp).

(4) Kelp (Order laminariales) and intertidal wetland vascular plants (except noxious weeds) adversely impacted due to construction of piers, docks, floats, rafts, ramps, boathouses, and houseboats shall be replaced using proven methodology.

(5) Mitigation measures for piers, docks, floats, rafts, ramps, and associated moorings shall include, but are not limited to, restrictions on structure width and/or incorporation of materials that allow adequate light penetration (i.e., grating) for structures located landward of -10.0 feet MLLW.

(6) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid adverse impacts to Pacific herring spawning beds and rockfish and lingcod settlement and nursery areas.

(7) Piers, docks, floats, rafts, ramps, boathouses, houseboats, and associated moorings shall be designed and located to avoid adverse impacts to juvenile salmonid migration routes and rearing habitats.

(8) Floatation for the structure shall be fully enclosed and contained to prevent the breakup or loss of the floatation material into the water.

(9) Boathouses and houseboats and covered moorages shall not be located landward of -10.0 feet MLLW.

Draft Rule Language:

220-110-370 Residential docks, watercraft lifts, and buoys in saltwater areas

The provisions in this section apply to the design and construction of docks, watercraft lifts, and mooring buoys whether permanent, seasonal, or temporary, in saltwater areas.

(1) DESCRIPTION

A pier is a stationary overwater structure supported by piling that extends out from the shoreline. A float is a walkway or other surface that floats on the water. A ramp is a walkway that connects a pier or shoreline to a float and provides access between the two. Pilings, which 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 floating surface structure used for private and commercial vessel moorage.

(2) FISH LIFE CONCERNS

Overwater and in-water structures can alter physical processes that create or maintain fish habitat. These include changing the light regime, hydrology, substrate conditions, and water quality. Light reduction is the main impact to fish habitat. Light reduction or shading by overwater or in-water structures reduces survival of aquatic plants. Aquatic plants provide food, breeding areas, and protective nurseries for fish, shellfish, and many other animals.

Shallow water provides juvenile fish a refuge from predators like larger fish. Overwater and in-water structures can alter movement of juvenile salmon, steelhead and other fish species. Structures grounding on the bed can physically block migration. The light/dark contrast of shading/no shading caused by overwater and in-water structures can affect migration behavior. Fish respond by moving into deeper water which increases the risk of predation.

(3) RESIDENTIAL PIER, RAMP, FLOAT, WATERCRAFT LIFT AND BUOY DESIGN - GENERAL

- (a) Design and locate structures to avoid or minimize impacts to fish migration corridors, and forage fish spawning, nursery and settlement areas.
- (b) New structures may consist of a pier only; pier, ramp and float; or a swim float only if:
 - (i) Structures must be located at least twenty-five feet (measured horizontally from the edge of the structure) in all directions away from seagrass and kelp.
 - (ii) In herring spawning areas, structures are located at least twenty-five feet (measured horizontally from the edge of the structure) in all directions away

- from macroalgae beds with algae species on which herring spawn.
- (iii) Structures are designed and located to avoid adverse impacts to juvenile salmonid mitigation routes and rearing habitats.
 - (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 to lights from sunset to sunrise.
 - (v) The design ensures floats do not ground on the bed.
 - (vi) The design does not include skirting unless specifically approved in an HPA.
- (c) The department may authorize replacing floating docks in saltwater areas if:
- (i) The replaced floating dock is not expanded.
 - (ii) The replaced floating dock is not relocated within waters of the state without written authorization from the department. The replaced structure must be removed and disposed of upland such that it does not reenter state waters.
 - (iii) The replacement floating dock must not ground on the bed. There must be at least eighteen inches of space between the beach and the bottom of the float.
 - (iv) A replacement floating dock no wider than six feet wide must have at least thirty percent functional grating of the deck surface. A replacement floating dock wider than six feet must have at least fifty percent functional grating installed in the deck surface. Flotation must be located under the solid decked area only. Functional grating is that portion of grating that is not obstructed by any timber or support structures, including float material or tubs. Grating must have at least a sixty percent open area.
- (d) The design must not use treated wood for the decking of the structure. The design may use ammoniated copper quaternary (ACQ) and ammoniacal copper zinc arsenate (ACZA)-treated wood for structural elements.
- (e) Treated wood structural elements subject to abrasion by vessels, floats, or other objects must incorporate design features to minimize abrasion of the wood.
- (f) All grating must have at least a forty-two to sixty percent open area areas depending on the percent of deck area covered. Grating must be oriented so the lengthwise opening maximizes the amount of light penetration. Any objects on, above, or below the grating should not block light penetration.
- (g) Use the smallest number of piling required to construct a safe structure.
- (h) Piles must be no larger than 12 inches in diameter. Space 4-inch to 8-inch diameter piles no closer than 18 feet apart. Space 10-inch to 12-inch diameter piles no closer than 20 feet apart. The department will grant exceptions to the maximum pile diameter and minimum spacing if a qualified professional recommends a different standard to address public safety.
- (i) New and replacement piling can be steel, concrete, recycled plastic, or untreated or use ammoniated copper quaternary (ACQ) and ammoniacal copper zinc arsenate (ACZA)-treated wood that has undergone an industry standard post-treatment

process that is verified with a certificate.

- (j) Treated wood piling must incorporate design features such as abrasion-resistant material: Ultra High Molecular Weight polyethylene, or polypropylene rubbing strips to minimize abrasion of the piling by vessels, floats, or other objects.
- (k) The department will allow the use of fill around piling only when the substrate prevents the driving of piles.
- (l) Fill material is limited to clean rock and concrete.
- (m) Limit the amount of fill to the least required to secure the piles.

(4) PIER DESIGN

- (a) Piers must span intertidal and wetland plants (except noxious weeds), surf smelt, and Pacific sand lance spawning beds.
- (b) The pier may not be more than six feet wide unless there are engineering or safety constraints.
- (c) Piers between four and six feet wide must have at least thirty percent functional grating installed on the deck surface. Grating must have at least a sixty percent open area.
- (d) If the pier is oriented in a north/south direction, grating must be installed parallel to the length of the pier for the entire length of the pier. If the pier is oriented in another direction, grating must be installed parallel to the width of the pier, evenly spaced along the entire length of the pier.
- (e) The bottom of the pier must be at least four feet above the MHHW line elevation.

(5) RAMP DESIGN

- (a) Ramps must not exceed four feet wide.
- (b) Deck ramps entirely with grating.

(6) FLOAT DESIGN

- (a) Floats must not exceed eight feet in width.
- (b) Unless there are engineering or safety constraints, single-family dock floats must not be longer than thirty feet and joint-use dock floats must not be longer than sixty feet.
- (c) If a float is positioned perpendicular to the ramp to serve as a ramp landing, the float must not be more than six feet wide and ten feet long.
- (d) A float six feet wide or less must have at least thirty percent functional grating of the deck surface. A float between six and eight feet wide must have at least fifty percent functional grating installed in the deck surface. Flotation must be located under the solid decked area only. Functional grating is that portion of grating that is not obstructed by any timber or support structures, including float material or tubs. Grating must have at least a sixty percent open area.
- (e) Flotation for the structure must be fully enclosed and contained in a shell (tub) that prevents breakup or loss of the flotation material into the water, and is resistant to

ultraviolet radiation and abrasion.

- (f) Helical screw or “duckbill” anchor(s), piling, piling with stoppers, and float support/stub pilings may be used to hold floats in place.
- (g) If a project uses anchors to hold the float in place, the anchor lines must not rest on the substrate at any time.

(7) WATERCRAFT LIFT/GRID DESIGN

- (a) Design the watercraft lift/grid to minimize shading caused by the structure.
 - (i) The bottom of the watercraft lift/grid must rest at least 1 foot above the bed.
 - (ii) Use the fewest additional piles required to support the watercraft lift/grid.
- (b) Limit wall materials to the minimum open structural framework needed for roof support.

(8) BUOY DESIGN

- (a) In waterbodies where buoy systems might damage the bed and submerged aquatic vegetation, locate and design the buoy system to minimize damage.
- (b) Place the buoy deep enough to prevent vessel grounding.
- (c) Locate the buoy to avoid shading impacts from vessels and/or damage from vessel propellers to submerged aquatic vegetation.
- (d) Design the buoy system so that anchor lines do not drag.
- (e) Use an embedment-style mooring anchor instead of surface-style mooring anchor unless there are engineering, safety or environmental constraints.
- (f) Adequately size the mooring to prevent the anchor from shifting or dragging along the bed.
- (g) The buoy must have a shell that is resistant to ultraviolet radiation (sunlight) and abrasion caused by rubbing against vessels, the bed, and/or waterborne debris.

(9) RESIDENTIAL PIER, RAMP, FLOAT, WATERCRAFT LIFT, AND BUOY CONSTRUCTION

- (a) Operate and anchor vessels and barges so that they do not adversely impact seagrass or macroalgae species used as herring spawning substrate.
- (b) The dock centerline must be re-established during construction using the same methodology used to establish the centerline during the vegetation survey.
- (c) When possible, use a vibratory hammer to drive steel piling.
- (d) When impact pile driving, use the smallest drop or hydraulic impact hammer required to complete the job, and set the drop height to the minimum needed to drive the piling.
- (e) The department may require sound attenuation such as bubble curtains to minimize harm to fish from impact pile-driving noise.
- (f) To avoid attracting fish to light at night, limit pile driving to daylight hours.
- (g) During piling removal, the department may require the following:

- (i) Use a vibratory system to dislodge piling unless there are engineering, safety, or environmental constraints.
 - (ii) After removal, place the piling on a construction barge or other dry storage site.
 - (iii) If a treated wood pile breaks during extraction, remove the stump from the water column by fully extracting the stump, cutting it three feet below the substrate or pushing it to that depth.
 - (iv) Cap the buried stump with clean sediment that matches the native material.
 - (v) Fill holes left by piling extraction with clean sediment that matches the native material.
- (h) Securely anchor floats and mooring buoys.
- (i) If the department authorizes the use of a concrete anchor, use a pre-cast concrete anchor.
 - (j) Dispose of replaced piers, ramps, floats, lines, chains, cables, or mooring anchors in an upland area.
 - (k) Place floats and buoys removed seasonally in an upland area. Do not store on the beach.

Section Title: WAC 220-110-420 Outfall and tide and flood gate structures in saltwater areas

Background: This section now aligns with the RCW 77.55.161 and RCW 77.55.281. The section reflects current fish science and technology measures to avoid or minimize adverse modifications to fish and shellfish habitat from outfall and tide gate structures.

Summary of New Section or Proposed Changes: This new section describes the limits of WDFW's authority to regulate outfalls including those covered by NPDES permits. In locations not covered by an NPDES permit, WDFW must make a finding that the discharge would harm fish life and allow the applicant an opportunity to avoid adverse impacts through local ordinances. Construction requirements to minimize impacts to fish habitat are included. The new section also limits WDFW's authority to regulate tide gates on agricultural drainage systems.

Public Comments:

Support

No specific comments received to date.

Concerns

Requiring a fishway on culvert installed after May 2003 could prove to be burdensome and unfair to the agricultural community.

Proposed Rule Language:

220-110-420 Outfall and tide and flood gate structures in saltwater areas

(1) DESCRIPTION

Outfalls move water from one place to another, typically to a body of water. Outfalls may convey stormwater, or other waste materials. Tide and flood gates are adjustable gates used to control water flow in estuary, river, stream, or levee systems.

(2) FISH LIFE CONCERNS

Outfalls can increase erosion of a bed and bank, trap sediment, and cause a direct loss of beach and bank riparian habitat.

(3) LIMIT OF DEPARTMENT AUTHORITY OVER STORMWATER OUTFALL AND TIDE AND FLOODGATE PROJECTS

(a) The department may not provision HPAs for storm water discharges in locations covered by a national pollution discharge elimination system municipal storm water

general permit for water quality or quantity impacts. An HPA is required only for the actual construction of any stormwater outfall or associated structures.

- (b) In locations not covered by a national pollution discharge elimination system municipal storm water general permit, the department may issue HPAs that contain provisions to protect fish life from the direct hydraulic impacts of the discharge, such as scouring or erosion of the waterbody bed.
 - (i) Before issuing an HPA under this subsection, the department must:
 - (A) Find that the discharge from the outfall will cause harmful effects to fish life;
 - (B) Provide the findings to the applicant and to the city or county where the project is being proposed; and
 - (C) Allow the applicant to use local ordinances or other mechanisms to avoid the adverse effects resulting from the direct hydraulic discharge. The forty-five day requirement for HPA issuance under RCW 77.55.021 is suspended while the department is meeting the requirements of this subsection.
- (c) After following the procedures set forth in (b) of this subsection, the department may issue an HPA that prescribes the discharge rates from an outfall structure to prevent adverse effects to the bed or flow of the waterway. The department may recommend, but not specify, the measures required to meet these discharge rates. The department may not require changes to the project design above the mean higher high water mark of marine waters.
- (d) The department may not require a fishway on a tide gate, flood gate, or other associated human-made agricultural drainage facilities as a provision of a permit if such a fishway was not originally installed as part of an agricultural drainage system existing on or before May 20, 2003. The department may require a fishway on a tide or flood gate as part of a non-agricultural drainage system and on agricultural drainage systems existing after May 20, 2003.

(4) OUTFALL DESIGN

- (a) The shoreline bank and bed at the point of discharge must be protected using bioengineering methods or other department-approved methods to prevent scouring.
- (b) Design and locate outfalls so that outflow or any associated energy dissipaters do not cause loss of fish and shellfish habitat. The department may require that energy be dissipated using one or more of the following methods, or other effective method:
 - (i) Existing natural habitat features such as large logs, root wads, natural large rocks, or rock shelves without degrading these features;
 - (ii) Pads of native plants (shrubs and grasses) and biodegradable fabric;
 - (iii) Imported fish habitat components (large woody material);
 - (iv) Manufactured in-line energy dissipaters, such as a tee diffuser;
 - (v) Rounded rock energy dissipation pads;

- (vi) Angular rock energy dissipation pads, if other options are not possible.
- (c) The outlet of submerged outfall piping protruding above grade in marine environments must extend past minus thirty feet MLLW. An outfall pipe or other structural element that crosses a beach must be buried deep enough to avoid interrupting the longshore sediment drift.

(5) OUTFALL CONSTRUCTION

- (a) To protect critical food fish or shellfish habitats, the department may apply timing constraints to proposed projects. The department must consider the construction techniques, location of the project, and characteristics of habitats potentially affected by the project. The department may inspect the work area to evaluate the habitats near the project.
- (b) During times when work in waters of the state is prohibited to protect nearshore juvenile salmonid migration, rearing, and feeding areas, the department may permit construction if the outfall is located at or landward of the OHWL, and if all construction work is conducted from the landward side of the project.
- (c) The department may require a person to establish structure elevations relative to permanent benchmarks before starting work on the project. The benchmarks must be located, marked, and protected to serve as a post-project reference for ten years.
- (d) A person must not conduct project activities when tidal waters cover the work area including the work corridor, except the area occupied by a grounded barge.
- (e) The conveyance pipe centerline must be re-established during construction using the same methodology used to establish the centerline during the aquatic vegetation survey.
- (f) No stockpiling of excavated materials containing silt, clay, or fine-grained soil is allowed below the OHWL.
- (g) The department may allow stockpiling of sand, gravel, and other coarse material below the OHWL. Place this material within the designated work corridor waterward of the OHWL. Remove all excavated or stockpiled material from the beach within seventy-two hours of construction.
- (h) Backfill all construction-related trenches, depressions, or holes that are waterward of the OHWL before they are filled by tidal waters.
- (i) Retain all natural habitat features on the beach that are larger than four inches in diameter, including trees, stumps and logs, and large rocks.

Section Title: WAC 220-110-440 Test boring in saltwater areas

Background: The section reflects current fish science and technology measures to avoid or minimize adverse modifications to fish and shellfish habitat from boring activities.

Summary of New Section or Proposed Changes: This new section includes new requirements for boring conducted for sediment sampling. Requirements include minimizing turbidity and discharge of silt, specifics for deposit of waste materials and for sealing the boring hole.

Public Comments:

Support

No specific comments received to date.

Concerns

No major concerns expressed to date.

Proposed Rule Language:

220-110-440 Test boring in saltwater areas

(1) DESCRIPTION

Boring is used to obtain information about the physical properties of the bed. This information is often needed to design foundations for proposed structures and to repair existing structures.

(2) FISH LIFE CONCERNS

Boring-related impacts to fish life are usually minor and short-term. Short-term impacts from the project include increased turbidity and noise levels and small vibrations created mainly from the drill rig.

(3) BORING CONSTRUCTION

While boring, a person must:

- (a) Take samples only within the proposed footprint of the hydraulic project.
- (b) Conduct boring in a way that minimizes turbidity and discharge of silt to the water column.
 - (i) Completely contain each boring and cone penetration action within the casing.
 - (ii) Do not discharge turbid or slurry laden process water to state waters.
 - (iii) Minimize suspending sediment while collecting samples. Place all excess sediment and water derived during coring activities in proper containers,

labeled, characterized, and disposed of by the operators in accordance with the appropriate guidelines.

- (iv) Deposit all waste material such as drill spoils and cuttings, construction debris, silt, excess dirt, excess gravel, or overburden resulting from this project in an upland location so that it does not enter waters of the state.
- (c) After geo-technical information has been logged, seal the borehole and substrate surface with the appropriate material including bentonite grout, pellets, and/or chips.
- (d) 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.