Summary

Meeting dates: November 8-9, 2013 Commission Meeting

Agenda item 4: 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 about three proposed new hydraulic code rule sections.

This presentation will cover:

(1) 220-110-080 Mitigation requirements for hydraulic projects
(2) 220-110-110 Authorized work times in freshwater
(3) 220-110-120 Freshwater habitats of special concern

Approximately 25 minutes will be needed for the presentation and questions/answers.

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 220-110-080 Mitigation Requirement for Hydraulic Projects

Background: The existing rule has definitions for mitigation and no-net-loss. However, the existing rule does not explain how the department implements mitigation requirements. In addition, several statutory changes and policies are not reflected in the existing rule. These include the following:

- RCW 77.55.241 Off-site Mitigation
- RCW 77.55.251 RCW Mitigation Plan Review
- RCW 90.74 RCW Aquatic Resources Mitigation
- State of Washington Alternative Mitigation Policy Guidelines from the Departments of Ecology and Fish and Wildlife (2000)
- Interagency Regulatory Guide on Advance Permittee-Responsible Mitigation (2012)

Summary of New Section or Proposed Changes: This new section specifies mitigation requirements, compensatory mitigation, and mitigation plan requirements to assure no-net-loss. A sub-section on mitigation banks and credits is included. The section includes the requirements for and contents of a mitigation plan. This section makes the Hydraulic Code Rules consistent with WDFW's current mitigation statutes.

Public Comments:

Support

The regulated community, in general, supports the department clarifying that the environmental baseline for purposes of calculating compensatory mitigation requirements under this chapter is habitat conditions at the time the HPA application is submitted. They also support the language that clarifies when the department may require compensatory mitigation. The regulated community also expressed support for the department's inclusion of alternative compensation methods. These include fish conservation banks, in-lieu fee programs, and advanced mitigation.

Concerns

The regulated community has expressed concern over the cost of mitigation especially the cost of compensation. They have also expressed concern that the department will require mitigation plans more often than we do currently once the rules are adopted.

As a sub-set of the regulated community, the prospecting community expressed concern they would have to pay for surveys, studies or reports required by the department to determine if the proposed mitigation will protect fish life.

Tribes and the conservation community have expressed concern about the department's inability to mitigate for cumulative impacts under RCW 77.55. They have also expressed concern about the purposed environmental baseline for the purposes of calculating compensatory mitigation. Some tribal comments suggest the environmental baseline should be the pre-disturbance condition for replacement structures because compensatory mitigation was likely not required when the structure was originally built.

Draft Rule Language:

220-110-080 Mitigation requirements for hydraulic projects

All projects must meet the requirements in WAC 220-110-080 – Mitigation requirements for hydraulic project approvals and the requirements in WAC 220-110-100 through 220-110-440 that are included in an HPA. The department will require certain technical provisions depending upon the individual proposal and site specific characteristics. Additional special provisions may be included, as necessary to address site-specific conditions.

(1) DESCRIPTION

Generally, mitigation is an action taken to lessen the impact of another action. The department defines mitigation as sequentially avoiding impacts, minimizing impacts, or compensating for remaining unavoidable impacts. The department mitigates impacts to fish life from hydraulic projects through the application of the requirements in this chapter.

(2) FISH LIFE CONCERNS

Most work in or near water can negatively impact fish life. Best management practices such as proper design and siting, construction timing, isolation of the work area, sediment and erosion control planning, water-quality management, and re-vegetation can avoid and minimize many of these impacts. However, remaining impacts may require compensation to offset the loss of fish habitat function and area by habitat type.

(3) MITIGATION REQUIREMENTS

(a) The department must determine the project impact, severity of impact, and amount of mitigation required to achieve no net loss based on the best available information.

(b) The permittee or authorized agent must pay for any surveys, studies or reports required by the department to determine if the proposed mitigation will protect fish life.

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

(d) Mitigation includes all of the action steps in the mitigation sequence. The department and the applicant must consider and implement mitigation actions in the following sequential order:

(i) Avoid the impact altogether by not taking a certain action or parts of an action.

(ii) Minimize impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.

(iii) Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

(iv) Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.

(v) Compensate for remaining impacts by replacing, enhancing, or providing substitute resources or environments.

(e) The department may require advanced mitigation.

(4) COMPENSATORY MITIGATION

(a) Compensatory mitigation is not required for hydraulic projects that do not cause measurable adverse impacts after other actions in the mitigation sequence are completed.

(b) The department must determine compensatory mitigation actions needed to offset impacts remaining after other actions in the mitigation sequence are completed.

(c) When compensatory mitigation is necessary to offset impacts, the department prefers compensatory mitigation actions that restore impacted functions on-site or immediately adjacent to the impact site. However, the department will consider off-site mitigation if it is more cost effective and it provides more benefit to the fish species or fish stock impacted by the work. The department may not limit the scope of compensatory mitigation options to areas on or near the project site, or to habitat types of the same type as contained on the project site. The department must fully review and give due consideration to compensatory mitigation proposals that improve the overall biological functions and values of the watershed or bay and accommodate the mitigation needs of the infrastructure development or non-infrastructure development, including proposals or portions of proposals that are explored or developed in RCW 90.74.040.

(d) The department will base mitigation credits and debits on a scientifically valid measure of fish habitat function, value, and area. Mitigation must compensate for temporal losses, uncertainty of performance, and differences in habitat functions, types and value.

(e) The department will consider use of credits from an approved programmatic option such as a 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 occurred at the impact site. These credits should benefit the same fish stocks or fish species as those impacted by the hydraulic project.

(f) The department may require monitoring to determine the extent and severity of impacts and the effectiveness of the compensation projects. The department may require corrective measures needed to achieve performance goals and objectives specified in the HPA.

(g) The environmental baseline for purposes of calculating compensatory mitigation requirements under this chapter is habitat conditions at the time the HPA application is submitted.

(h) The department will evaluate impacts caused by a hydraulic project by comparing the condition of the habitat before project construction or the performance of work to the expected condition of the habitat after project completion.

(i) Routine maintenance and repair work on an existing structure does not require compensatory mitigation unless:

(i) The maintenance and repair work causes a new loss of habitat function or area not associated with the original construction.

(ii) The work increases or changes the footprint of the existing structure.

(j) Rehabilitation and replacement of a structure does not require compensatory mitigation unless:

(i) The new design or other changes cause a new net loss of habitat function or area not associated with the original construction.

(ii) Construction activities associated with the rehabilitation and replacement project causes a new loss of habitat function or area not associated with the original construction.

(iii) The rehabilitated or replaced structure does not comply with the technical requirements in this chapter or does not provide equal or greater protection for fish life when compared to the technical requirements this chapter.

(k) Removal of a man-made or engineered structure does not require compensatory mitigation. However, the department may require bank resloping, revegetation, and other job site stabilization measures following structure removal.

(l) The department may require the project proponent to submit a monitoring and contingency plan to ensure the compensatory mitigation meets the performance goals and objectives. This plan may be part of a larger mitigation plan.

(5) MITIGATION PLAN

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

(b) The department must notify the applicant in writing if a mitigation plan is required and specify what the plan must include.

(c) The person may use a mitigation plan to propose compensatory mitigation within a watershed. A mitigation plan must:

(i) Contain language that guarantees long-term viability of the created, restored, enhanced, or preserved habitat, including assurances for protecting any essential biological functions and values defined in the mitigation plan;

(ii) Contain language for long-term monitoring of any created, restored, or enhanced mitigation site; and

(iii) Be consistent with the local comprehensive land use plan and any other applicable planning process in effect for the development area, such as an adopted sub basin or watershed plan.

(d) The department is not required to grant approval to a mitigation plan that does not provide equal or greater fish habitat functions and values within the watershed or bay.

(e) When making a permit decision, the department must consider whether the mitigation plan provides equal or greater fish habitat functions and values, compared to the existing conditions, for the target fish species or fish stocks identified in the mitigation plan. This consideration must be based upon the following factors:

(i) The relative value of the mitigation for the target fish species or fish stocks, in terms of the quality and quantity of habitat functions and values provided;

(ii) The compatibility of the proposal broader resource management and habitat management objectives and plans, such as existing resource management plans, species recovery plans, 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;

(iii) The ability of the mitigation to address scarce functions or values within a watershed;

(iv) The benefits of the proposal to the broader watershed landscape, including the benefits of connecting various habitat units or providing population-limiting habitats or functions for target fish species;

(v) The benefits of early implementation of habitat mitigation for projects that provide compensatory mitigation in advance of the project's planned impacts; and

(vi) The significance of any negative impacts to non-target fish stocks, fish species or resources.

(f) A mitigation plan may be approved through a memorandum of agreement between the project proponent and the department.

(g) The department will require a memorandum of agreement between the project proponent and the department if mitigation actions including monitoring exceed the life of the HPA.

Section Title: WAC 220-110-110 Authorized Work Times in Freshwater Areas

Background:

The Department published and posted on our public website *Times When Spawning or Incubating Salmonids are Least Likely to be Within Washington State freshwaters (2010)*. These work windows are used by habitat biologists to condition the timing of in-water work. There are no specific authorized work times in rule with exception of the mineral prospecting windows published in the *Gold and Fish* pamphlet.

Summary of New Section or Proposed Changes: This new section specifies the criteria WDFW will follow to determine when work should occur. The criteria includes life history stages of fish life present, the expected impact of construction activities, and Best Management Practices (BMPs) proposed by the project proponent. These criteria will allow WDFW to be more flexible in establishing work windows for specific conditions rather than the current system of standard dates applicable to all waters.

Public Comments:

Support

The regulated community has expressed support for flexible work windows based on project and site-specific conditions.

Concerns

The regulated community has expressed concern that work windows, in general, affect their ability to obtain contractors because the demand is high for the portion of the year when in-water work is authorized. In addition, the regulated community expressed concern about the cost of remobilizing when work cannot be completed within one work window.

Draft Rule Language:

220-110-110 Authorized work times in freshwater areas

All projects must meet the requirements in WAC 220-110-080 – Mitigation requirements for hydraulic project approvals and the requirements in WAC 220-110-100 through 220-110-440 that are included in an HPA. The department will require certain technical provisions depending upon the individual proposal and site specific characteristics. Additional special provisions may be included, as necessary to address site-specific conditions.

(1) DESCRIPTION

The department applies work windows to reduce the risk of impacts to fish at critical life stages. In-water work is limited to non-critical periods of the year unless a person can take mitigation measures to eliminate risk during critical periods.

(2) FISH LIFE CONCERNS

Work in or around watercourses can result in harmful effects to fish life. Therefore, this work must occur when the risk of these harmful effects can be avoided or reduced. Using timing windows helps ensure that in water work avoids damage to incubating eggs and fry, and juvenile fish.

(3) DETERMINING AUTHORIZED WORK TIMES

(a) The department must specify authorized work times for hydraulic projects in or adjacent to waters of the state when it issues HPAs. When determining the authorized work times, the department will use the information below to determine the appropriate work window on a project by project basis:

(i) Life history stages of the fish and shellfish species present:

(A) Presence or absence of spawning, incubating, rearing, and/or migrating habitat at or near the work site.

(B) The migration timing of juveniles (smolts in the case of anadromous salmon and steelhead) and adults in both fresh and saltwater.

(ii) The expected impact of construction activities, equipment type and access.

(iii) Best management practices proposed by the project proponent, including proposed 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.

(iv) Mitigation measures volunteered or imposed upon the project.

(v) Weather conditions during, or predicted to occur, during construction activities.

(vi) Other circumstances and conditions.

(b) The department must publish the times when spawning salmonids and their incubating eggs and fry are least likely to be within Washington state freshwaters on its public website.

Section Title: WAC 220-110-120 Freshwater Habitats of Special Concern

Background: The habitat for twenty-two priority fish species requires protective measures for their survival due to their population status or sensitivity to habitat alteration. These include spawning and rearing habitats for state and federal listed species, and species of recreational, commercial or tribal importance.

Summary of New Section or Proposed Changes: The presence of freshwater habitats of special concern or areas in close proximity for the twenty-two fish species may restrict project type, design, location, and timing. The department may determine the location of such habitats by a site visit. In addition, the department may consider maps, publications and other available information to determine the location. This section also identifies habitats that serve essential functions in the developmental life history of fish life and important ecosystem processes that form and maintain freshwater habitats of special concern.

Public Comments:

Support

No specific comments received to date.

Concerns

No specific comments received to date.

Draft Rule Language:

220-110-120 Freshwater habitats of special concern

All projects must meet the requirements in WAC 220-110-080 – Mitigation requirements for hydraulic project approvals and the requirements in WAC 220-110-100 through 220-110-440 that are included in an HPA. The department will require certain technical provisions depending upon the individual proposal and site specific characteristics. Additional special provisions may be included, as necessary to address site-specific conditions.

(1) DESCRIPTION

Freshwater habitats of special concern provide essential functions in the developmental life history of priority fish species. These include spawning and rearing habitats for state and federal listed species, and species of recreational, commercial or tribal importance.

The presence of freshwater habitats of special concern or areas in close proximity with characteristics may restrict project type, design, location, and timing. The department may determine the location of such habitats by a site visit. In addition, the department may consider maps, publications and other available information to determine the location.

(2) FISH LIFE CONCERNS

There are ninety-one species of fish in Washington, fifty species of native fish and forty-one introduced fish species. In Washington, six salmon and three steelhead Evolutionarily Significant

Units (ESUs) stocks as well as bull trout Distinct Population Segments are listed under the endangered Species Act.

(3) FRESHWATER HABITATS OF SPECIAL CONCERN

(a) A person may request Information from the department about the location of freshwater habitats of special concern.

(b) Freshwater habitats of special concern are fish habitats where priority fish species are present and may be categorized into the following types of areas:

(i) Chinook salmon (*Oncorhynchus tshawytscha)* spawning habitat located in the gravel and cobble areas of river mainstems and larger tributary streams. Chinook spawn in rivers and streams in the Columbia River, Coastal and Puget Sound drainages.

(ii) Chum salmon (*Oncorhynchus keta)* spawning habitat located in the gravel riffles and pool tailouts in shallow stream reaches and side channels where water velocities are lower. Chum salmon spawn in rivers and streams in the lower Columbia River, Coastal and Puget Sound drainages.

(iii) Coho salmon (*Oncorhynchus kisutch)* spawning habitat located in the gravel riffles and pool tailouts. Coho spawn in the rivers and streams in the Columbia River, Coastal and Puget Sound drainages.

(iv) Pink salmon *(Oncorhynchus gorbuscha)* spawning habitat located in the gravel riffles and pool tailouts. Pink salmon spawn in rivers and streams in the Columbia River, Coastal and Puget Sound drainages.

(v) Sockeye salmon *(Oncorhynchus nerka)* spawning habitat located in the gravel riffles in lake tributary rivers and streams and sometimes along lake shores where seepage outflows, springs, or wind-induced waves occur. These lakes include, but are not limited to the following:

(A) Baker Lake

(B) Lake Washington

(C) Lake Sammamish

(D) Lake Wenatchee

(E) Lake Osoyoos

(F) Lake Ozette

(G) Lake Pleasant

(H) Lake Quinault

(vi) Coastal resident/searun cutthroat (*Oncorhynchus clarki clarki)* spawning habitat located in riffle areas of headwater streams. Coastal cutthroat spawn in streams in the lower Columbia River, Coastal and Puget Sound drainages.

(vii) Westslope cutthroat *(Oncorhynchus clarki lewisi)* spawning habitat located in riffle areas of headwater streams and alpine lake tributary streams on clean, small gravel substrates. Westslope cutthroat spawn in streams including, but not limited to, those in the Lake Chelan, Methow and Pend Oreille River basins.

(viii) Kokanee *(Oncorhynchus nerka)* spawning habitat located in the gravel riffles areas of lake tributary rivers and streams and along lake shorelines. These lakes include, but are not limited to the following:

(A) Olympic Region
(B) Lake Ozette
(C) Lake Crescent
(D) Lake Whatcom
(E) Baker Lake
(F) American Lake
(G) Summit Lake
(H) Lake Washington
(I) Lake Wenatchee
(J) Lake Chelan
(K) Palmer Lake
(L) Lake Osoyoos
(M) Banks Lake
(N) Lake Roosevelt
(O) Rim Rock Lake
(P) Loon Lake
(Q) Deer Lake
(R) Long Lake
(S) Chapman Lake

(ix) Bull trout *(Salvelinus confluentus)* spawning habitat located in gravel and small cobble in upper reaches of clear streams in areas of flat gradient. This includes pockets of gravel in very steep streams. Bull trout spawn in streams in the Columbia River, Coastal and Puget Sound drainages.

(x) Rainbow trout/steelhead/inland redband trout *(Oncorhynchus mykiss)* spawning habitat located in the gravel of stream riffles and pool tailouts. Coastal Rainbow trout and steelhead spawn in tributary streams to rivers and lakes in the Columbia River, Coastal and Puget Sound drainages. Redband trout spawn tributary streams to rivers and lakes in mid-Columbia River drainage.

(xi) Pygmy whitefish *(Prosopium coulteri)* spawning habitat located in coarse gravel in shallow areas in lakes and tributary streams. These lakes include, but are not limited to, the following:

(A) Lake Bead
(B) Lake Sullivan
(C) Lake Chelan
(D) Lake Chester Morse
(E) Lake Cle Elum
(F) Lake Kachess
(G) Lake Keechelus
(H) Lake Osoyoos

(xii) Pacific lamprey *(Entosphenus tridentate)* spawning habitat located in stream riffles and pool tailouts with fine gravel and sand substrates and rearing areas located in fine silt and mud substrates in backwaters and quiet eddies of streams.

(xiii) River lamprey *(Lampetra ayresi)* spawning habitat located in stream riffles and pool tailouts with fine gravel and sand substrates and rearing areas located in fine silt and mud substrates in backwaters and quiet eddies of streams.

(xiv) Green sturgeon (*Acipenser medirostris)* spawning habitat and rearing areas located in the lower Columbia River.

(xv) White sturgeon (*Acipenser transmontanus)* spawning habitat located in swift, deep water over cobble, boulder, and bedrock substrate in the Columbia and Snake Rivers basins.

(xvi) Olympic mudminnow (*Novumbra hubbsi)* habitat located in coastal lowland wetlands of the Olympic Peninsula and nearby areas of Washington, west and south of the Olympic Mountains, from Lake Ozette to Grays Harbor and up the Chehalis River drainage. Mudminnow are found in quiet waters with mud or dark bottoms, usually well-vegetated areas and areas under overhanging banks, especially in marshy streams and brownish water of bogs and swamps.

(xvii) Lake chub (Couesius plumbeus) spawning habitat located over coarse gravel, small rubble and rocks in shallow water. Lake chub spawn in lakes and tributary streams including, but not limited to the following:

(A) Lake Pend Oreille

(B) Lake Roosevelt

(C) Lake Okanogan

(xviii) Leopard *dace (Rhinichthys falcatus)* spawning habitat located in riffles of rivers and tributary streams. These rivers include, but are not limited to, the following:

(A) Columbia River

(B) Snake River

(C) Yakima River

(D) Methow River

(E) Simikameen River

(xix) Umatilla dace *(Rhinichthys Umatilla)* spawning habitat located in riffles of rivers and tributary streams. These rivers include, but are not limited to, the following:

(A) Columbia River

(B) Snake River

(C) Yakima River

(D) Okanogan River

(E) Simikameen River

(F) Kettle River

(G) Colville River

(xx) Mountain sucker *(Catostomus platyrhynchus)* spawning habitat located in riffles of small clear, cold tributary streams in the Columbia River System.

(xxi) Eulachon *(Thaleichthys pacificus)* spawning habitat located in the tidally influenced sections of the following rivers and streams in areas typically composed of sand and/or pea gravel. Eulachon spawn These rivers include, but are not limited to, the following:

(A) Lower Columbia River

(B) Grays River
(C) Skamokawa Creek
(D) Elochoman River
(E) Cowlitz River
(F) Toutle River
(G) Kalama River
(H) Lewis River
(I) East fork of Lewis
(J) Quinault River
(K) Sandy River
(L) Elwha River
(M) Nooksack River

(xxii) Margined sculpin habitat primarily located in pools and slow moving glides with small gravel and silt substrates. Margined sculpin spawn in the headwater tributaries of the Walla Walla, Touchet, and Tucannon Rivers.

(c) The following habitats serve essential functions in the developmental life history of fish life:

(i) Spawning habitat

(ii) Cover habitat provided by large woody debris, live tree roots, deep pools, shallow water, undercut banks, overhanging vegetation, turbulence and large interstitial areas in cobble or boulder substrate.

(iii) Off-channel habitat including but not limited to wall-based channels, flood swales, side channels and floodplain spring channels.

(iv) Native aquatic vegetation

(v) Riparian areas

(d) The following are important ecosystem processes that form and maintain freshwater habitats of special concern:

(i) Woody material sources, delivery and transport, and

(ii) Sediment sources, delivery and transport.