

Thoughts on Fish Passage Requirements

Statutory Intent

509.585 Fish passage required for artificial obstructions; statewide inventory; waiver of requirement by commission; rules; exemptions. (1) *It is the policy of the State of Oregon to provide for upstream and downstream passage for native migratory fish* and the Legislative Assembly finds that cooperation and collaboration between public and private entities is necessary to accomplish the policy goal of providing passage for native migratory fish and to achieve the enhancement and restoration of Oregon's native salmonid populations, as envisioned by the Oregon Plan. Therefore, ***except as provided in ORS chapter 509, fish passage is required in all waters of this state in which native migratory fish are currently or have historically been present.***

(2) Except as otherwise provided by this section or ORS 509.645, a person owning or operating an artificial obstruction ***may not construct or maintain any artificial obstruction*** across any waters of this state that are inhabited, or historically inhabited, by native migratory fish without providing passage for native migratory fish.

(4) A person owning or operating an artificial obstruction shall, prior to ***construction, fundamental change in permit status or abandonment*** of the artificial obstruction in any waters of this state, obtain a determination from the department as to whether native migratory fish are or historically have been present in the waters. If the department determines that native migratory fish are or historically have been present in the waters, the person owning or operating the artificial ***obstruction shall either submit a proposal for fish passage to the department or apply for a waiver*** pursuant to subsection (7) of this section. Approval of the proposed fish passage facility or of the alternatives to fish passage must be obtained from the department prior to construction, permit modification or abandonment of the artificial obstruction.

(5) Consistent with the purpose and goals of the Oregon Plan, the department shall seek cooperative partnerships to remedy fish passage problems and to ensure that problems are corrected as soon as possible. The department and the person owning or operating the artificial obstruction are encouraged to negotiate the terms and conditions of fish passage or alternatives to fish passage, including ***appropriate cost sharing***. The negotiations may include, but are not limited to, ***consideration of equitable factors***.

(6) The department shall submit a proposed determination of the required fish passage or alternatives to fish passage to the commission for approval. The determination may be the result of the negotiations described in subsection (5) of this section or, if no agreement was reached in the negotiations, a determination proposed by the department. If a protest is not filed within the time period specified in ORS 509.645, the proposed determination shall become a final order.

Statutory Definitions

As used in ORS 509.580 to 509.590, 509.600 to 509.645 and 509.910: (1) "Artificial obstruction" means any dam, diversion, culvert or other human-made device placed in the waters of this state that precludes or prevents the migration of native migratory fish.

(2) "Construction" means:

- (a) Original construction;
- (b) Major replacement;
- (c) Structural modifications that increase storage or diversion capacity; or
- (d) For purposes of culverts, installation or replacement of a roadbed or culvert.

(4) ***"Fundamental change in permit status" means a change in regulatory approval for the operation of an artificial obstruction where the regulatory agency has discretion to impose additional conditions on the applicant, including but not limited to licensing, relicensing, reauthorization or the granting of new water rights, but not including water right transfers or routine maintenance permits.***

Rule Considerations

The **current administrative rules at OAR 635-412-005** defines "Construction" as it relates to dams as:

(9) "Construction" means:

- (a) Original construction;
- (b) Major replacement, which includes:
 - (A) for dams and diversions, ***excavation or replacement of 30 percent by structure volume of the dam***, including periodic or seasonal replacements, unless:
 - (i) Only checkboards are replaced; or
 - (ii) Fish passage approval has already been obtained in writing from the Department for expected replacement.

Issues with the Current Language

- A. The language appears to only address the concept of "major replacement" and does not address "structural modifications that increase storage capacity or diversion capacity".
- B. The determination of "30 percent by structure volume of the dam" is a very imprecise measure and does not address the variety and consequences of different types of dams.
- C. The clear intent of the statute is to increase fish passage where it has historically been blocked to the extent possible.
- D. For the purpose of having a rule that is both clear to owners of obstructions and the department, there needs to be a change from the current standard.
- E. In addition to the clarity of when fish passage requirements are "triggered" there needs to be clarity on how to evaluate "net benefit" for those historic barriers that demonstrate that fish passage is infeasible.

Ideas for Consideration

Development of criteria for different conditions of dams could help to provide more certainty of when fish passage considerations need to be addressed. Along with criteria there is the potential for consideration of different evaluations of "net benefit" in different situations. The following language is a proposed starting point for a conversation about alternative approaches.

Potential Rule Approach and Language- Definitions

“Major replacement” means changes to a dam structure that has a measurable effect on the storage behind the dam or flows from the dam. At a minimum, a major replacement involves any change in the outlet structure, impoundment structure, or operational conditions that affects downstream flows or upstream impoundment conditions.

This proposal looks at the effect of the change in the dam structure, not an arbitrary percentage of change.

“Structural modification” means any dam alteration that involves a change to the capacity or flow of water in a manner that affects fish either upstream or downstream.

This proposal looks at the effect of change to the dam structure.

Another approach is to look at the statutory language at ORS 509.585 (5) where the evaluation is to consider “appropriate cost sharing” and “consideration of equitable factors”. If cost and equitable factors were considered a rule could be fashioned around the proposed work and the agency could shift the burden to the applicant to demonstrate that the cost of fish passage in relation to the cost of the proposed project at the artificial obstruction is near the cost of the of the “major replacement” or “structural modification”.

Language such as:

“Major replacement” for dams or diversions means any alteration to the dam or diversion that allows for the consideration of fish passage that considers:

- a) The relative cost of fish passage to the cost of the dam or diversion alteration,
- b) The relative cost of potential mitigation if a waiver is proposed,
- c) The effect of passage or mitigation on the productivity of native migratory fish affected by the artificial obstruction.

All evaluations of native migratory fish population effects are subject to the determination by department staff.”

The current provision in rule that excludes the consideration of checkboards and previous fish passage approval could be applied to either or both definitions.

This proposal ensures that every alteration to dams or diversions are reviewed and evaluated. It defers to ODFW the determination on the equitable impacts to native migratory fish and develops a conversation between dam and diversion operators and the department.

Rationale

This approach focuses on the effects of alteration or replacement of dam structures. The determination of whether there is a potential effect of the proposed change is a biological determination, not an engineering determination. The focus is on the potential for further effects on native migratory fish populations that have been obstructed from areas necessary to complete their life cycle. It looks towards the policy objective for “Oregon to provide for upstream and downstream passage for native migratory fish”. While it is not an arbitrary percentage alteration threshold, it uses a threshold

determinable at each specific location of an artificial obstruction considering the nature of the obstruction, nature of the proposed alterations and effects on the aquatic environment.

Potential Rule Approach and Language – Review Standard

The Statute defines “Net Benefit” at ORS 509.580 as: “(7) **“Net benefit” means an increase in the overall, in-proximity habitat quality or quantity that is biologically likely to lead to an increased number of native migratory fish after a development action and any subsequent mitigation measures have been completed.**”

The current Administrative Rule at OAR 635412-0005 (33) repeats the statutory language.

For the purpose of evaluating Net Benefit for public dams that have been in place for more than 20 years, the net benefit evaluation will be based on the amount (length) of available habitat above the dam, quality of the habitat above the dam, and likelihood of effects of climate change to habitat above the dam. These considerations will be balanced against mitigation that provides assured habitat benefits below the dam that includes flow protection, habitat improvement, and tributary improvements that are guaranteed by the owner or operator of the dam. The evaluation will be based on a determination that the proposed mitigation is assured to an increased population size of native migratory fish and a monitoring plan is provided and funded to demonstrate the change in native migratory fish.

Additional Issue

The concept of “trigger” is not defined in neither in statute nor rule. It appears to be a convention created by staff for the purpose of identifying an activity that allows ODFW review of fish passage. The only use of the term in rule is in the review of waivers at OAR 635-412-0025(6). The statute defines the authority of ODFW as “a person owning or operating an artificial obstruction may not construct **or maintain** any artificial obstruction across any waters of this state that are inhabited, or historically inhabited, by native migratory fish without providing passage for native migratory fish.” Maintaining a fish passage barrier does not involve the concept of a “trigger event”. I would suggest that there is an opportunity for ODFW to address fish passage even without “construction or change in permit status”.

This could be a discretionary authority but used to address barriers that are not under construction separate and distinct from the “triggers” that are associated with “construction” as defined in statute and rule.