



COEXISTING WITH BEAVERS IN OREGON:

Navigating policies, statutes, administrative rules and guidelines

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Introduction

The following report attempts to outline the current regulatory landscape for beaver-based restoration, including beaver dam analogs, pond levelers and culvert protectors in Oregon.

State and federal plans for the conservation and recovery of salmon and steelhead species listed in the *Endangered Species Act* (ESA) describe how beaver and beaver dams can create high-quality rearing habitat for juvenile salmon and steelhead. For example, the federal recovery plan for Oregon Coast coho salmon specifically recommends beavers, beaver dams, and beaver dam analogs (BDAs) to support beaver-based restoration, and implementation of the Beaver Restoration Guidebook, to support recovery of this threatened species. In arid areas of Oregon, generally east of the Cascade mountains, beaver-based restoration is being recommended and implemented by agencies and landowners to help restore groundwater and increase water security. Unfortunately, the federal and state laws that protect Oregon’s rivers, salmon and fish and wildlife habitat make it difficult, if not impossible, to get permits for beaver-based restoration and coexistence projects, despite the fact that they can protect ecosystem health and contribute to species resilience and recovery.



Figure 1. This report consolidates information from government agencies for those implementing beaver-based restoration.



This report includes the following sections:

- [Government Context and Contacts](#)
- [Planning requirements for Beaver Coexistence Devices](#)
- [Looking forward: Permitting Pathway for Beaver Coexistence Devices](#)
- [Oregon Statutes Relevant to Beaver-based Restoration](#)
- [Relevant Oregon Administrative Rules \(OAR\)](#)

Government Context and Contacts

Many regulatory bodies at the federal and state levels have mandates that intersect with beaver dams and any structure installed in a natural waterway (Figure 2). We list these agencies, their potential role key contacts in the table below (Table 1).

STAKEHOLDER MAP

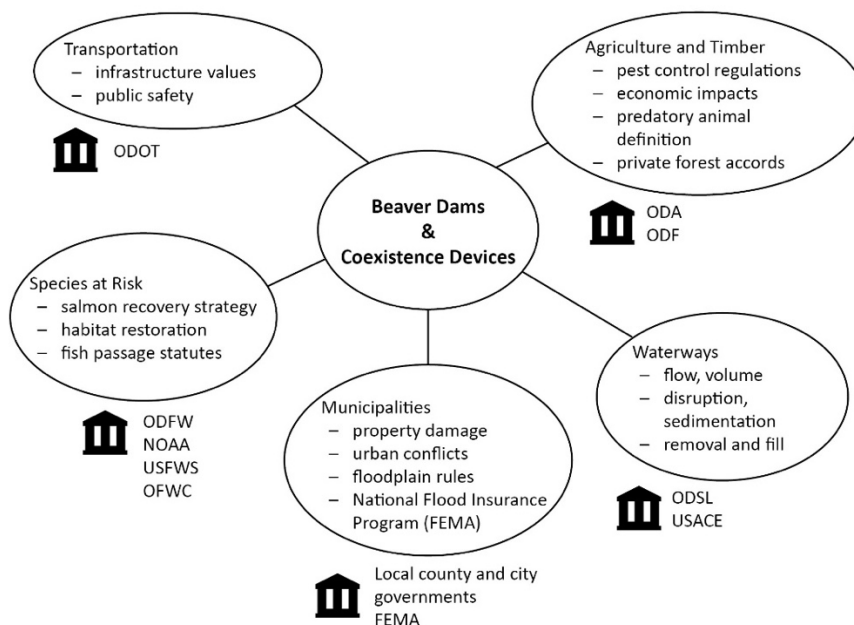


Figure 2: Five key areas that have relevant regulations, definitions, guidelines and administrative rules



AGENCIES

State and Federal Agencies	References ¹	Role/Duties
Oregon State Agencies		
Oregon Fish and Wildlife Commission (OFWC)	ORS 497,498	<ul style="list-style-type: none"> - "... make decisions affecting the wildlife resources of the state..." - Prescribe and administer trapper education - Open/close areas to trapping
	Key Contact(s):	Oregon Fish and Wildlife Commission, Chair <i>Current contact person: Mary Wahl</i>
Oregon Dept. of Fish and Wildlife (ODFW)	ORS 496.004 OAR 635-050-0050 ORS 509.580 OAR 141-085	Implement furbearer rules on public land Implement fish passage statute and regulations including task force
	Key Contact(s):	Oregon Department of Fish and Wildlife, Director <i>Current contact person: Curt Melcher</i>
	Fish passage	Statewide Fish Passage Program, Program Leader <i>Current contact person: Greg Apke,</i> <i>Email: Greg.D.Apke@state.or.us</i> <i>Phone: 503-931-4361</i>
	Beaver policy (public land)	Interdivision Beaver Coordinator <i>Current contact person: Adrienne Averett</i> <i>Email: Adrienne.W.AVERETT@odfw.oregon.gov</i> <i>Phone: 971-808-8799</i> Carnivore-Furbearer Coordinator <i>Current contact person: Derek Broman</i> <i>Email: Derek.j.broman@state.or.us</i> <i>Phone: 503-947-6095</i>
Oregon Dept. of Agriculture (ODA)	ORS 610.002	Implement predatory animal rules on private land
	Beaver policy (private land)	<i>We did not identify a contact role or person</i>
Oregon Dept. of State Lands (ODSL)	ORS 196.668 OAR 141-085-506	Implement wetland removal/fill rules
	Key Contact(s):	Removal-Fill Specialist <i>Current contact person: Bethany Harrington</i> <i>Email: Bethany.Harrington@dsl.oregon.gov</i> <i>Phone: 541-325-6171</i>
Oregon Dept. of Environmental Quality (ODEQ)	Section 401 of the Clean Water Act	Implement water quality rules
	Key Contact(s):	<i>We did not identify a contact role or person</i>
Dept. of Transportation (ODOT)	Limit 10(i) under section 4(d) of the Endangered Species Act (ESA), final rule (65 FR 42422)	Maintain road/highway culverts using BMPs to protect and conserve salmon and steelhead that are listed as threatened within Oregon's waters, as depicted in the ODOT Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices (Blue Book)
	Key Contact(s):	<i>We did not identify a contact role or person</i>



State and Federal Agencies	References ¹	Role/Duties
Oregon Dept. of Forestry (ODF)	ORS 527.710	Operators must submit a plan prior to removal of beaver dams.
	2022 Private Timber Accord	A 2022 agreement, includes the prioritizing beaver conflict resolution with non-lethal methods
Key Contact(s):		<i>We did not identify a contact role or person</i>
Federal Agencies		
National Oceanic and Atmospheric Administration (NOAA) Fisheries	Endangered Species Act	Protect listed commercial fish species (salmon/steelhead)
	Key Contact(s):	Senior Policy Advisor (Portland) Current contact person: Irma Lagomarsino, Email: irma.lagomarsino@noaa.gov Phone: 707 496-1679
US Fish and Wildlife Service (USFWS)	Endangered Species Act	Protect listed species (including non-commercial fish species like bull trout, lamprey, etc)
	Key Contact(s):	Aquatic Resources Division Manager Oregon Fish & Wildlife Office Current contact person: Chris Allen, Email: Chris.Allen@fws.gov Phone: 503-231-6906 Aquatic Ecologist, Oregon Fish & Wildlife Office Current contact person: Brian Bangs Email: brian_bangs@fws.gov Phone: 541-908-1538
United States Army Corps of Engineers (USACE)	§ 401 of Clean Water Act	Require permits to discharge into navigable waters
	Key Contact(s):	Portland Permits Section Chief Current contact person: Melody White Email: Melody.J.White@usace.army.mil Phone: 503-201-0797
Federal Emergency Management Agency (FEMA)	Floodplain development	National Flood Insurance Program
	Key Contact(s):	<i>We did not identify a contact role or person</i>

Table 1: Agencies that may have regulations relevant to coexistence device projects.

¹ Legislation, statutes, regulations, etc. Acronyms: Oregon Revised Statute (ORS), Oregon Administrative Rule (OAR).



Planning Requirements for Beaver Coexistence Devices

Beaver coexistence devices are a unique construction project that defy conventional permitting pathways. The habitat benefits and ecological goods and services provided by beaver-managed flood plains are well understood. However, the Best Management Practices for coexistence solutions have only recently been assembled (Shockey 2023) and there is yet no straightforward permitting pathway through the regulatory framework.

Beaver dam analogs (BDAs) and Post Assisted Log Structures (PALS) are similar projects to culvert protectors and pond levelers. Unlike culvert protectors and pond levelers, there are now clear regulatory requirements for BDAs and similar beaver-based restoration techniques. These requirements are provided in the table below (Table 2), followed by a space where we outline the similar requirements that have yet to be determined for culvert protectors and pond levelers. Subsequent updates to this report will include planning requirements for these coexistence devices as they become available; until then, these gaps in guidance are indicated with red text.

Subject	Requirement/Guidance	Relevant statute or regulation
Beaver Dam Analogs (BDAs)		
	Fish passage (ODFW) <ul style="list-style-type: none"> Approval is not needed if there are no migratory fish or if BDAs/VPSs meet criteria Expedited ODFW approvals if consistent with BRG and LtPBR Manual BDAs and PALS that don't conform must submit standard application 	ORS 509.580-910 State of Oregon Fish Passage Approvals for Instream Habitat Restoration Actions “The primary goal of this new policy guidance bulletin (see below) is to streamline and expedite the state’s fish passage review and approval procedures for instream habitat restoration projects designed and implemented to specifically mimic natural habitat features created by beaver and beaver dams.”
	General Authorization (ODSL)	ORS 196 OAR 141-085,089,090,093 Fill/removal rules
	401 (ODEQ)	Clean Water Act § 401 permitting Water quality rules
	Regulatory Compliance (USACE)	Applied for as joint part of General Authorization permitting (ODSL)
	ESA Compliance (NOAA and USFWS)	Triggered through other permits
	NEPA Compliance (USFS or BLM)	Only applicable if on public land
	Archeologic compliance (Oregon State Historic Preservation Office)	Requirement triggered through other permits (via ODSL and USACE)



Subject	Requirement/Guidance	Relevant statute or regulation
	Local government permitting	FEMA Flood insurance requirements of local planning departments to insure “no-rise” for floodplain development projects. Currently requires an engineer certification of no-rise. This could result in a requirement to submit a Conditional Letter of Map Revision to FEMA
Materials/construction guideline	BDA is “comprised of organic materials and with a porous organic material weave between untreated wood posts”	ODFW BDA Guidance
Work window	In-water work windows shall be implemented, unless otherwise negotiated by ODFW	Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources [link, fs.usda.gov]
Monitoring/adaptive management	Monitoring report required policy guidance by Dec. 31 annually for 3 years	ODFW BDA Guidance
Pond Levelers		
	Fish passage (ODFW) <ul style="list-style-type: none"> • If no large-bodied fish are present, no approval needed if constructed with no less than 6” by 6” size mesh. • If large-bodied fish are present, case-by-case approval required 	ORS 509.580-910 ODFW Division 412 Fish Passage Administrative Rules 635-412-0035 Fish Passage Criteria (3)(C) i-iv (lines 725-732)
	Guidance Needed General Authorization (ODSL)	Unknown applicability ORS 196 OAR 141-085,089,090,093 Flow devices would seem to fall under the 50 Cubic foot exception, except when working in Essential Salmon Habitat
Materials/construction guideline	Minimize adverse impacts to habitat, cage and hide the intake 30’ – 60’ upstream, adequately sized and vented pipe, durable materials and no pressure treated wood, modify for stream width, depth and other features as described in BMP document. Construct with hand tools only.	No agency guidance <i>Best Management Practices for Pond Levelers and Culvert Protection Systems (Shockey 2023)</i>
Work window	In-water work windows shall be implemented, unless otherwise negotiated by ODFW	Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources [link, fs.usda.gov]



Subject	Requirement/Guidance	Relevant statute or regulation
Monitoring/adaptive management	Maintenance visits a minimum of once a year.	No agency guidance <i>Best Management Practices for Pond Levelers and Culvert Protection Systems (Shockey 2023)</i>
Culvert Protection		
	Fish passage (ODFW) <ul style="list-style-type: none"> • If no large-bodied fish are present, no approval needed if constructed with no less than 6” by 6” size mesh. • If large-bodied fish are present, case-by-case approval required 	ORS 509.580-910 ODFW Division 412 Fish Passage Administrative Rules 635-412-0035 Fish Passage Criteria (3)(C) i-iv (lines 725-732)
	Guidance Needed General Authorization (ODSL)	Unknown applicability ORS 196 OAR 141-085,089,090,093 Flow devices would seem to fall under the 50 Cubic foot exception, except when working in Essential Salmon Habitat
Materials/construction guidelines	Minimize adverse impacts to habitat, facilitate wildlife passage, durable materials and no pressure treated wood, modify for site specific features as described in BMP document. Construct with hand tools only.	No agency guidance <i>Best Management Practices for Pond Levelers and Culvert Protection Systems (Shockey 2023)</i>
Work window	In-water work windows shall be implemented, unless otherwise negotiated by ODFW	Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources [link , fs.usda.gov]
Monitoring/adaptive management	Maintenance visits a minimum of once a year.	No agency guidance <i>Best Management Practices for Pond Levelers and Culvert Protection Systems (Shockey 2023)</i>

Table 2: Potential planning requirements and relevant statutes, regulations or other documents for BDAs, pond levelers and culvert protection.



Looking Forward—Permitting Pathway for Beaver Coexistence Devices

At the time of this report, a broader conversation is supporting a collaborative process to develop an expedited permit pathway for installing coexistence devices like pond levelers and culvert protectors in Oregon. [Project Beaver](#) is one of many non-governmental organizations working to promote coexistence strategies that empower landowners with better tools to "live with beavers." These efforts align with state and federal strategies and public communication around living with beavers, accelerating the pace of landscape-scale beaver-based restoration, fish recovery and water issues. Staff at ODFW have voiced a commitment to working with federal agencies and others to prepare a permitting pathway for beaver coexistence flow devices that are in accordance with the BMPs—similar to the 2020 ODFW permitting pathway that was established to support the implementation of BDAs in Oregon

The following diagram represents the two key groups navigating question of responsible beaver management, The Beaver Coalition (dba Project Beaver) and other NGOs and relevant State and Federal Agencies. By identifying areas of shared interest and motivation, and working collaboratively toward common goals, it is hoped that a clear framework for beaver coexistence projects will be achieved.

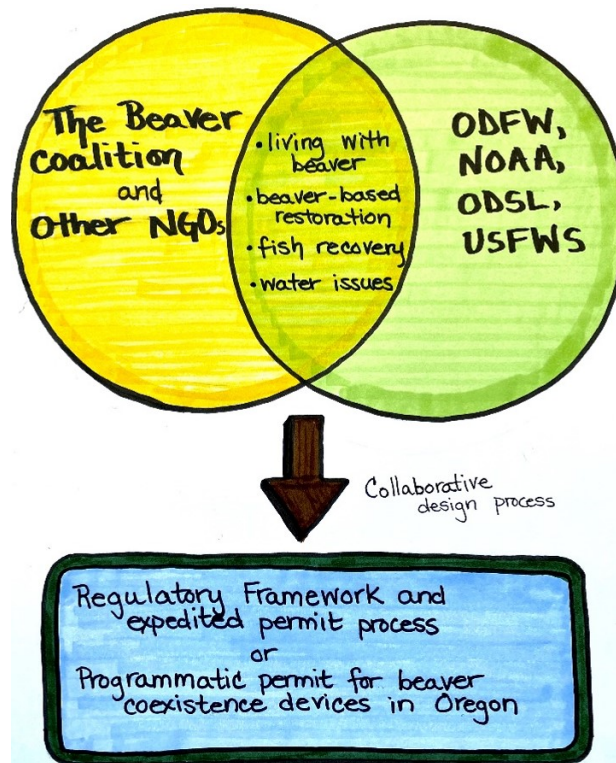


Figure 3: Two key groups navigating question of responsible beaver management



A complication to beaver-based restoration is the implementation of fish passage statutes and regulations by the ODFW. In practice, these regulations greatly restricted the implementation of coexistence solutions to beaver/human conflicts in Oregon in 2019 and into 2020, as well as BDAs for few years before that. Recognizing this, in 2020 ODFW developed an expedited permitting pathway for those BDAs that are implemented in accordance with the best management practices (BMPs) outlined in the Beaver Restoration Guidebook (Pollock et. al. 2017) and the Low-tech Process-based Restoration of Riverscapes Design Manual (Wheaten et. al. 2019).

During 2021 and 2022, a working group was convened by Project Beaver with Fuse Consulting that included staff from ODFW, NOAA Fisheries, and the USFWS. This group provided guidance on the development of the *Best Management Practices for Pond Levelers and Culvert Protection Systems*, which was published in December 2022. Also in late 2022, ODFW approved their new Division 412 Fish Passage Administrative Rules, which established guidance for flow devices in accordance with this new Best Management Practices (BMP) document for streams without large-bodied fish. These new rules also established that flow devices will be approved for fish passage on a case-by-case basis in streams with large bodied fish. In May 2023, Project Beaver has issued a revised BMP document (version 1.2) that was responsive to final ODFW comments (Shockey 2023). Staff at ODFW have voiced a commitment to working with federal agencies and others to prepare a permitting pathway for beaver coexistence flow devices that are in accordance with the BMPs—similar to the 2020 ODFW permitting pathway that was established to support the implementation of BDAs in Oregon. Likewise, staff at NOAA Fisheries, USFWS and USACE have voiced a commitment to better defining a straightforward process to ensure compliance for beaver coexistence flow devices with the ESA and other federal laws.



Oregon Statutes Relevant to Beaver-based Restoration

The following table lists Oregon Revised Statutes and definitions that may have bearing on characterization of pond levelers and culvert protectors. As these devices retain beaver managed floodplains and slow the flow of runoff, they present a net benefit for fish species. They have some “artificial” components but are not designed to be “obstructions.” Naturally occurring beaver dams remain on site and would continue to be the main obstruction in the waterway – an obstruction that is both porous and passable by fish, who have evolved to navigate and benefit from these habitat features. This list and the summaries are not exhaustive. Please review any relevant statutes in full before beginning any project.

In addition to these statutes, the following state policy serves to protect beaver dams:

Attention Coastal Beaver Trappers: ODFW requests your continued cooperation in protecting beaver dams in coastal areas important to Coho salmon rearing. If you are not familiar with this program, which was initiated in 1998, please contact your local ODFW biologist. — 2022 Oregon Furbearer Hunting and Trapping Regulations

Oregon Revised Statute (ORS)	Subject	Summary
ORS 509.580	Definitions for: - ORS 509.580-590 - ORS 509.600-645 - ORS 509.910	“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[...] “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 [...] measures have been completed.
ORS 509.585	Fish passage required for artificial obstructions	(1) It is the policy of the State of Oregon to provide for upstream and downstream passage for native migratory fish. (6) The department shall submit a proposed determination of the required fish passage or alternatives to fish passage to the commission for approval.
	Statewide inventory	(1) ODFW shall complete and maintain a statewide inventory of artificial obstructions in order to prioritize enforcement actions based on the needs of native migratory fish.



Oregon Revised Statute (ORS)	Subject	Summary
	Waiver of requirement by commission	(7)(a) The commission shall waive the requirement for fish passage if the commission determines that the alternatives to fish passage proposed by the person owning or operating the artificial obstruction provide a net benefit to native migratory fish. [See the full ORS for determining net benefit]
	Rules and Exemptions	(7)(c) ODFW Director shall develop rules establishing general criteria for determining the adequacy of fish passage and of alternatives to fish passage. [See the full ORS for a list of criteria]
ORS 509.625	Power of department to inspect artificial obstructions and have fish passage constructed or remove obstruction	(1) The State Department of Fish and Wildlife may determine or ascertain by inspection of any artificial obstruction whether it would be advisable to construct fish passage [...]
ORS 509.645	<ul style="list-style-type: none"> - Filing protest with commission - Review and determination by commission - Alternative dispute resolution 	(1) A person owning or operating an artificial obstruction may request alternative dispute resolution... A person owning or operating an artificial obstruction may file a protest with the State Fish and Wildlife Commission within 30 days from the receipt of the State Department of Fish and Wildlife determinations under ORS 509.585. The person shall identify the grounds for protesting the department's determinations.

Table 3: Oregon Statutes relevant to beaver-based restoration



Relevant Oregon Administrative Rules (OAR)

There are also administrative rules that govern projects in waterways in Oregon. The following table lists OARs relevant to the ODSL and ODFW (Table 4). The removal/fill exemption under the ODSL may apply to flow devices, and may mean that no involvement or permit is required from the ODSL. It is included here to help clarify whether removal/fill rules apply to these restoration projects. Note: This list and the summaries are not exhaustive. Please review any relevant rules in full before beginning any project.

Subject	OAR	Summary
Department of State Lands		
Remove/fill exemptions	141-085-0530	These exemptions apply in all waters of this state except State Scenic Waterways.... (7) Fish Passage and Fish Screening Structures in Essential Indigenous Anadromous Salmonid Habitat (ESH). Less than 50 cubic yards of removal-fill for construction or maintenance of fish passage and fish screening structures that are constructed, operated or maintained under ORS 498.306, 498.316, 498.326 or 509.600 to 509.645. This exemption includes removal of material that inhibits fish passage or prevents fish screens from functioning properly.
Waterway Habitat Restoration	141-089-0790	(1) Fish and Wildlife Passage. This activity includes installation or replacement of fish passage structures including, but not limited to vertical slot fishways, nature-like fishways and lamprey ramps to aid fish and/or wildlife passage. (5) Porous Weir. This activity includes the construction of a self-sustaining, low profile, structure. A porous weir delays but does not store water. It is used to redirect flow toward the center of the channel, provide energy dissipation and promote increased sedimentation along banks while allowing fish passage through a porous design. This activity includes, but is not limited to cross vanes and artificial riffles.
Department of Fish and Wildlife		
Survival guidelines for listed species	635-100-0135	(A) Fish passage statutes ORS 498.351 and 509.605. These statutes require adequate upstream and downstream fish passage at dams or artificial obstructions.
Fish passage task force	635-412-0010	(1) The Director shall appoint nine members to constitute the Fish Passage Task Force, [which will] serve as the public advisory committee and advise the Director and Commission regarding rulemaking to implement the fish passage and waiver requirements; ODFW shall establish a list of priority “artificial obstructions” defined as “any dam, diversion, dike, berm, levee, tide or flood gate, road, culvert or other human-made device placed in the waters of this state that precludes or prevents the migration of native migratory fish...”
Fish passage approval	635-412-0020	If ODFW determines that native migratory fish are or were present, ... prior to construction of artificial obstruction... approved fish passage plan is required [see full OAR for conditions for approval]
Fish passage waivers and exemptions	635-412-0025	(4) The Commission (or Department as applicable) may grant exemptions from fish passage requirements at an artificial obstruction if it is determined that... [see full OAR for conditions for exemptions]



Subject	OAR	Summary
Fish passage criteria	635-412-0035	<p>(d) If native migratory fish- or site-specific circumstances warrant it, the Department may provide an exception to any specific fish passage criterion if the Department determines in writing that fish passage shall still be provided;</p> <p>(e) All fish passage structures shall be designed to take into consideration their upstream and downstream connection and prevent undesirable impacts to fish passage [see OAR for list of mitigation examples and required information]</p> <p>(4) Requirements for fish passage at artificial obstructions in estuaries, and above which a stream is present, are:</p> <p>(a) Fish passage shall be provided at all current and historic channels;</p> <p>(b) Fish passage structures shall meet the criteria of OAR 635-412-0035(2) or (3), except fish passage structures shall be sized according to the cumulative flows or active channel widths, respectively, of all streams entering the estuary above the artificial obstruction; and</p> <p>(c) Tide gates and associated fish passage structures shall be a minimum of 4 feet wide and shall meet the requirements of OAR 635-412-0035(2) within the design streamflow range and for an average of at least 51% of tidal cycles, excluding periods when the channel is not passable under natural conditions.</p> <p>(5) Requirements for fish passage at artificial obstructions in estuaries, floodplains, and wetlands, and above which no stream is present, are:</p> <p>(a) Downstream Fish Passage: (A) Downstream fish passage shall be provided after inflow which may contain native migratory fish;</p> <p>(B) Downstream fish passage shall be provided until water has drained from the estuary, floodplain, or wetland, or through the period determined by the Department.</p>

Table 4: Summary of relevant Oregon Administrative Rules (OARs).