**Bold italicized text indicates new propose language.**

Strikethrough red text indicates text to be removed.

See lines 526 to 560 from existing rules.

635-412-0035  
Fish Passage Criteria (Tide Gates)

*(To be inserted into existing lines 526 – 533)*

(4) Requirements for fish passage at artificial obstructions in estuaries, and above which a stream is present, are:

(a) Fish passage shall be provided at all current and historic channels;
(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
(c) Tide gates and culverts or other associated fish passage structures shall:
   i) be a minimum of 4 feet wide;
   ii) consist of an aluminum tide gate door or other equivalent light weight material;
   iii) be a side hinged tide gate door configuration;
   iv) be sized according to the cumulative flows or active channel widths, respectively, of all streams entering the estuary above the artificial obstruction;
   v) consider fish passage design flows that include tidal exchange, freshwater stream discharge and water storage or retention volumes upstream of the tide gate;
   vi) meet the requirements of OAR 635-412-0035(2) or (3)(b) 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;
   vii) consider invert elevation placed at one foot below Mean Low Low Water (MLLW) elevation or otherwise appropriate for the site to prevent perched low flow fish passage conditions and allow proper tide gate function;

(d) Water management plans shall be developed for projects implementing self-regulating tide gate devices, including Muted Tidal Regulators (MTR).
(e) Alternative designs that meet the criteria that are not top-hinged or side hinged structures will be considered for fish passage ability.
Note: Tide gates associated with priority restoration habitat or habitat volumes 5 acres and
greater shall consider pet door and self-regulating tide gate devices, including Muted Tidal
Regulators devices to maximize water exchange, fish passage and tidal inundation.

(Existing lines 534 – 560)

(5) Requirements for fish passage at artificial obstructions in estuaries, floodplains, and wetlands, and
above which no stream is present, are:

(a) Downstream Fish Passage:
(A) Downstream fish passage shall be provided after inflow which may contain native migratory fish;
(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 which shall be based on one, or a
combination of, the following:
(i) A specific date;
(ii) Water temperature, as measured at a location or locations determined by the Department;
(iii) Ground surface elevation;
(iv) Water surface elevation; and/or
(v) Some other reasonable measure.
(C) Egress delays may be approved by the Department based on expected inflow frequency if there is
suitable habitat and as long as passage is provided by the time the conditions in OAR 635-412-
0035(5)(a)(B) occur;
(D) A minimum egress flow of 0.25 cubic feet per second (cfs) at one point of egress shall be provided;
(E) Egress flow of 0.5 cfs per 10 surface acres, for at least the first 100 surface acres of impounded
water, shall be provided;
(F) All plunging egress flows shall meet the requirements of OAR 635-412-0035(2)(l)(B);
(G) If egress flow is provided by a pump, it shall be appropriately screened;
(H) The minimum water depth and width through or across the point of egress shall be 4 inches;
(i) The ground surface above the artificial obstruction shall be sloped toward the point(s) of egress to
eliminate isolated pools and topographic conditions that may entrain native migratory fish; and
(J) An uninterrupted, open connection with a minimum water depth of 4 inches shall be present from the
point of egress to the downstream waters of this state, unless another connection is provided as per OAR
635-412-0035(2)(l)(A).

(b) Upstream Fish Passage: a fishway or road-stream crossing structure with or without a tide gate shall
be provided during the period determined by the Department if there is current or historic native migratory
fish spawning or rearing habitat within the estuary, floodplain, or wetland area impounded by the artificial
obstruction.
(4) Unvented fords and low water crossings
Note: The department will authorize construction of new unvented fords in limited situations when it is the least impacting water crossing option. The following are examples of situations where the department may authorize an unvented ford: (i) The stream has extreme seasonal flow variations and low flows during anticipated ford use; (ii) The channel has low bank height and low gradient approaches; (iii) The stream has dynamic flood plains, such as alluvial fans; or (vi) The stream is subject to mass wasting events, debris transport, or extreme peak flows.

Unvented ford crossings shall meet the requirements of OAR 635-412-0035(2); and shall:
(1) Be located outside of all known or suspected fish spawning areas such as pool tail-outs,
(2) Be constructed perpendicular to the stream flow, or as close to perpendicular as practicable,
(3) Minimize the width (perpendicular to flow) to the maximum extent practicable,
(4) Maintain similar water depths and flow velocities as surrounding stream during fish passage design flows,
(4) Have a low flow channel constructed within the crossing,
(5) Be constructed using materials approved by the department and shall:
   (a) Not be comprised of broken concrete, pavement or other debris,
   (b) Be comprised of clean washed gravel and rock,
   (c) Be countersunk and vertically align with the existing stream channel profile and gradient,
   (d) Be designed to allow natural bedload transportation, and
   (e) Be designed to withstand overtopping flood events.
(6) Be used during periods of no or low stream flow, and
(7) Be regularly inspected and maintained to provide fish passage.
635-412-0040
Mitigation Criteria
(1) Mitigation shall not be allowed for artificial obstructions located in, or which would prevent access to, "Habitat Category 1" habitat for native migratory fish as described in OAR 635-415-0025(1).
(2) Mitigation options include:
(a) Providing fish passage at another pre-existing artificial obstruction which is not required to address fish passage under OAR 635-412-0015 or 635-412-0020;
(b) Restoration or enhancement of native migratory fish habitat;
(c) Fish management measures to directly increase naturally-producing, wild, native migratory fish populations; and
(d) Other actions specifically approved by the Commission.
(3) Mitigation shall not include any activity that is a requirement or condition of any other agreement, law, permit, or authorization except if it is also for fish passage mitigation of the same action at the artificial obstruction for a different level of government.
(4) Unless a fish passage waiver for a site has already been obtained and mitigation has been provided, mitigation activities shall not be completed prior to a decision regarding a fish passage waiver.
(5) The Department shall approve final mitigation designs in writing prior to implementation.
NOTE: mitigation actions or concepts, absent specific designs, can be approved at the time a waiver decision is made.
(6) Mitigation actions that provide fish passage shall meet the fish passage criteria contained in OAR 635-412-0035.
(7) The Commission may require the posting of a bond or other financial instrument acceptable to the Commission to cover the cost of mitigation actions or providing fish passage at the artificial obstruction if the mitigation action does not achieve its goals.
(8) A person owning or operating an artificial obstruction is responsible for maintaining, monitoring, evaluating the effectiveness of, and reporting on mitigation.
(9) Mitigation:
(a) Shall be conducted in-proximity to the artificial obstruction, with respect to geographic scope;
(b) Shall have habitat type and quality which is more beneficial than that affected by the artificial obstruction, if mitigation is passage into, restoration of, or enhancement of habitat;

(c) Shall at least benefit the same native migratory fish species affected at the artificial obstruction;

(d) Shall have a clear benefit for those native migratory fish species affected at the artificial obstruction if their status is listed as "threatened" or "endangered" under the state or federal Endangered Species Act;

(e) Shall have standards for monitoring, evaluating, and adaptive management which are approved by the Department, which assure that the goal of the mitigation is achieved and maintained, and which are detailed in the waiver agreement required in OAR 635-412-0025(9);

(f) Shall be considered if the owner or operator of the artificial obstruction believes the feasibility of fish passage at the artificial obstruction is less than that for mitigation;

(g) May require quantification of baseline conditions before a decision regarding a fish passage waiver is made in situations with no existing information, which require recent information, or which have no clear benefit;

(h) Shall attempt to restore or enhance historic conditions;

(i) To the extent possible, shall be consistent with existing native migratory fish or watershed management plans;

(j) May qualify for financial incentives or grants issued by the Department and the owner's or operator's cost for mitigation or passage at the artificial obstruction shall not be a factor in the Department's net benefit determination;

(k) May require data collection and evaluation before a decision regarding a fish passage waiver is made in situations with no existing information, which require recent information, or which have no clear benefit; and

(l) Shall take into account the extent to which the proposed mitigation is likely to occur independent of a fish passage waiver;

(m) Shall take into account the expected effects of climate change, including effects to streamflows, water temperatures and the importance of protecting and restoring habitat for native migratory fish; and

(n) Shall be consistent with the purpose and goals of the Oregon Plan.