

## Lower Columbia River Coho

**635-100-0190**

### **Fishery Management**

(1) The mortality rate limit for wild coho salmon caught in Columbia River fisheries shall be set annually prior to the time these fisheries open. This limit shall not exceed the level specified in Table 1 of this rule corresponding with the observed parental escapement, expressed as a fraction of full seeding, and the index of marine survival for the upcoming adult coho return.

(2) For the purpose of implementing the management strategy described in paragraph (1) of this rule the following definitions apply:

(a) Parental escapement means the number of wild fish in the spawning population, expressed as a fraction of full seeding, that were the parents of the upcoming wild coho return;

(b) Marine survival index means a forecast of ocean survival for 3-year old coho returning in the upcoming year based upon the number of 2-year old hatchery coho (jacks) observed the previous year divided by the number of hatchery smolts released in the spring of the same year the jacks returned;

(c) Full seeding means the number of wild coho in a natural spawning population that is sufficient to produce maximum production of subsequent juvenile smolt offspring;

(A) Pending further revision, full seeding for the Clackamas population means 3,800 wild adult coho as counted passing North Fork Dam;

(B) Pending further revision, full seeding for the Sandy population means 1,340 wild adult coho as counted passing Marmot Dam.

(3) Wild coho populations in the Clackamas and Sandy basins shall serve as the index stocks for the purposes of setting annual fishery mortality rate limits.

(4) In those circumstances when ODFW deems the expected mortality of lower Columbia River wild coho in upcoming ocean fisheries is too high for conservation purposes, ODFW shall actively negotiate through the Pacific Fishery Management Council (PFMC) for regulations that yield a lower fishery mortality rate.

(5) Achievement of fishery management strategies described in this rule is contingent on continuation of fishing regulations and fish marking programs that minimize the impact on wild fish through selective fishing methods and the manipulation of fishing season time and location. In addition, ODFW shall continue to explore new methods to further reduce the mortality of wild fish in all fisheries.

[ED. NOTE: Tables referenced in this rule are available from the agency.]

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 112-2001, f. & cert. ef. 12-14-01

### **635-100-0191**

#### **Hatchery Programs**

(1) CONSERVATION HATCHERY PROGRAMS: ODFW shall take advantage of existing and new hatchery facilities to supply hatchery fish for selected projects to help restore natural production of wild coho. These projects will be treated as interim and experimental until their conservation value is demonstrated.

(a) In 2002 ODFW shall initiate at least 3 projects using hatchery fish to re-establish wild populations in stream sections upstream of artificial barriers at ODFW hatcheries.

(b) In 2003 ODFW shall initiate projects to restore natural production using hatchery fish in selected locations within the portion of coho habitat in the lower Columbia basin that in 2000, 2001, and 2003 had a density of wild spawners less than 2 wild fish per stream mile. Implementation of these projects is conditional on adequate funding for appropriate conservation hatchery approaches and monitoring and evaluation programs to assess project success and to manage the risk to wild populations while the projects are being conducted.

(2) MITIGATION AND HARVEST AUGMENTATION HATCHERY PROGRAMS: ODFW shall operate hatcheries in such a manner that adverse genetic and ecological interactions between hatchery and naturally produced fish are minimized through management of hatchery broodstocks, hatchery rearing environments and fish releases.

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 112-2001, f. & cert. ef. 12-14-01

### **635-100-0192**

#### **Land Management**

(1) All ODFW operated hatcheries and wildlife management areas shall comply with the survival guidelines for lower Columbia River coho as described in OAR 635-100-0135, including the fish passage and fish screening provisions. ODFW shall complete a report

by March, 2002 that sets priorities for the passage and screening modifications necessary at each hatchery from an evaluation of potential gains for natural coho production, the disease consequences to existing hatchery production, and the likely availability of necessary funds.

(2) The design of adult fish passage facilities shall incorporate the capacity for ODFW to restrict the number of hatchery fish that are allowed to migrate upstream as necessary once naturally self-sustaining populations have become re-established in these upstream areas.

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 112-2001, f. & cert. ef. 12-14-01

### **635-100-0193**

#### **Monitoring**

(1) De-listing decisions and the operation of fishery and hatchery programs requires monitoring and evaluation sufficient to measure risks and describe outcomes. ODFW shall implement such a monitoring program as sufficient funds become available.

(2) As funding becomes available, ODFW shall intensify its monitoring of juvenile and adult coho such that the data generated are directly comparable with coho information collected by ODFW from populations on the coast of Oregon.

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 112-2001, f. & cert. ef. 12-14-01

### **635-100-0194**

#### **De-listing Criteria**

(1) This rule describes the measurable criteria that define the minimum conservation goal for wild lower Columbia River coho. Upon meeting these criteria, ODFW shall be biologically justified to propose that species be removed from Oregon's endangered species list.

(2) For the purpose of evaluating the biological status of lower Columbia River wild coho with respect to the criteria described in this rule, the following geographic areas where

wild coho presently exist or are believed likely to exist in the future are defined as the recovery population boundaries.

(a) The Astoria population occurs in Youngs Bay tributaries and all Columbia tributaries upstream to and including Gnat Creek.

(b) The Clatskanie population occurs in Columbia River tributaries upstream of Gnat Creek to and including the Clatskanie River basin.

(c) The Scappoose population occurs in Columbia River tributaries upstream of the Clatskanie River to the mouth of the Willamette River.

(d) The Clackamas population occurs in the Clackamas River basin plus Columbia River tributaries to the Willamette River downstream of Willamette Falls.

(e) The Sandy population occurs in the Sandy basin plus Columbia River tributaries downstream to the mouth of the Willamette River.

(f) The Bonneville population occurs in Columbia River tributaries upstream of the Sandy River to and including the Hood River basin.

(3) To meet the minimum conservation goal, lower Columbia River coho must be found to meet all of the following biological criteria:

(a) Population Distribution and Structure -- Self-sustaining wild populations are present in the Sandy and Clackamas basins. In addition, at least two of the following populations (Astoria, Clatskanie, Scappoose, or Bonneville) are self-sustaining.

(b) Diversity -- Naturally reproducing wild coho are present in 65% of the named streams that historically contained coho. Human activities impose only minor artificial selection pressures on the phenotypic character of the wild populations. The ongoing impact of hatchery fish on the genetic character, evolutionary processes, and innate productivity of naturally reproducing populations is minor.

(c) Abundance -- For three consecutive years, the number of wild spawners is at least 50% of the level necessary to produce maximum smolt recruits (full seeding) for the Sandy, Clackamas, and in at least two of the following populations: Astoria, Clatskanie, Scappoose, and Bonneville.

(d) Connectivity -- No artificial barriers exist that prevent the dispersing of wild coho between naturally reproducing populations.

(e) Persistence and Resilience -- The probability of extinction in 36 years is less than 5% for the Sandy and Clackamas populations plus two of the following populations: Astoria, Clatskanie, Scappoose, and Bonneville.

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 112-2001, f. & cert. ef. 12-14-01

## **635-100-0135**

### **Survival Guidelines for Species Listed as Threatened or Endangered**

(1) As required by ORS 496.182 and OAR 635-100-0130, this rule describes survival guidelines for those species that were listed as threatened or endangered in OAR 635-100-0125 after enactment of ORS 496.182(2). Survival guidelines described in this rule apply to state agencies that own or manage land where threatened or endangered species are present (OAR 635-100-0130).

(2) Coho salmon with historic distribution in Columbia River tributaries downstream from Hood River qualify, by commission action, as an endangered species (OAR 635-100-0125) effective July 1999. These fish, known as lower Columbia River coho salmon, occur only in the Clackamas River and Sandy River watersheds at the time of listing. The survival guidelines are as follows:

(a) To prevent further degradation of water quality and water quantity, actions shall be avoided that:

(A) Cause a violation of water quality standards established by the Oregon Department of Environmental Quality; or

(B) Reduce stream flows below levels established in in-stream water rights by the Oregon Water Resources Department.

(b) To conserve stream gravel, actions shall be avoided that remove gravel from areas used by naturally spawning coho salmon;

(c) To protect riparian areas along those streams used by coho salmon for either spawning or juvenile rearing, actions shall be avoided that:

(A) Eliminate mature forests within 100 feet of streams;

(B) Prevent the natural re-establishment of mature forests within 100 feet of streams in areas where a mature forest previously existed; or

(C) Degrade vegetative cover within 100 feet of streams in areas where no forest has previously existed.

(d) To ensure survival of migrating coho juveniles and returning adults, activities shall be avoided that are inconsistent with:

(A) Fish passage statutes ORS 498.351 and ORS 509.605. These statutes require adequate upstream and downstream fish passage at dams or artificial obstructions; or

(B) Fish screening statutes ORS 409.301 through ORS 498.346 and ORS 509.615. These statutes regulate water diversions and the prevention of fish from entering water diversions.

(e) The total mortality impacts on ocean and in-river fisheries shall not exceed 15% of the total adult abundance of wild Lower Columbia coho salmon;

(f) The impacts of hatchery programs for coho salmon in the lower Columbia River on wild coho populations shall be consistent with the limits imposed by the Wild Fish Management Policy (OAR 635-007-0527).

Stat. Auth.: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Stats. Implemented: ORS 496.004, ORS 496.171, ORS 496.172, ORS 496.182, ORS 496.192 & ORS 498.026

Hist.: DFW 51-1999, f. & cert. ef. 7-22-99