# HATCHERY AND GENETICS MANAGEMENT PLAN (HGMP)

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|---|---|
| **Hatchery Program:** | SAFE Coho |
| **Species or Hatchery Stock:** | Coho, Stock 13 |
| **Agency/Operator:** | Oregon Department of Fish and Wildlife |
| **Watershed and Region:** | Lower Columbia, North Coast |
| **Date Submitted:** | September 28, 2005<br>February 24, 2025 |
| **Date Last Updated:** | February 24, 2025 |

## Section 1. GENERAL PROGRAM DESCRIPTION

**1.1. Name of hatchery or program.**
SAFE Coho program (Stock 13)

**1.2. Species and population (or stock) under propagation, and ESA status.**
SAFE Coho (*Oncorhynchus kisutch*)
Not Listed

**1.3. Responsible organization and individuals**
Lead Contact:
**Name (and title):** Scott Patterson, Fish Propagation Program Manager
**Agency or Tribe:** Oregon Department of Fish and Wildlife
**Address:** 4034 Fairview Industrial Dr. SE, Salem, OR 97302-1142
**Telephone:** 503-947-6218
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**Email:** Scott.D.Patterson@odfw.oregon.gov

Operation Staff Leads:
**Name (and title):** Steve Meshke, CCF Fisheries Project Leader
**Agency or Tribe:** Clatsop County Fisheries (CCF)
**Address:** 2001 Marine Drive, RM 253, Astoria, OR 97103
**Telephone:** 503-325-6452
**Fax:** 503-325-2753
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**Name (and title):** Cameron Duff, Columbia River Fisheries Project Leader
**Agency or Tribe:** Oregon Department of Fish and Wildlife
**Address:** 17330 SE Evelyn Street, Clackamas, OR 97015
**Telephone:** 971-673-6057
**Fax:** 971-673-6072
**Email:** Cameron.M.Duff@odfw.oregon.gov

**1.4. Funding source, staffing level, and annual hatchery program operational costs.**
The facilities utilized for this program are funded at various levels by the State of Oregon and BPA.

**1.5. Location(s) of hatchery and associated facilities.**
Youngs Bay Net Pens – Columbia River Estuary, RM 11 (46.178753 N, -123.856682 W)
Columbia Watershed, Oregon

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Tongue Point Net Pens – Columbia River Estuary, RM 18 (46.178753 N, -123.745794 W)
Columbia Watershed, Oregon

Blind Slough Net Pens – Columbia River Estuary, RM 27 (46.202949 N,-123.544389 W)
Columbia Watershed, Oregon

Klaskanine Hatchery – North Fork Klaskanine, RM 2.25 (46.0890, -123.7174)
North Fork Klaskanine Watershed, Oregon

SF Klaskanine Hatchery – South Fork Klaskanine, RM 3.6 (46.054848 N, -123.28841)
South Fork Klaskanine Watershed, Oregon

**1.6. Type of program.**
Isolated Harvest

**1.7. Purpose (Goal) of program.**
Mitigation – The goal of this program is to mitigate for the loss of fisheries due to the construction and operation of the hydropower dams on the Columbia River.

**1.8. Justification for the program.**
This program release fin-marked juveniles to produce hatchery adults for harvest.

**1.9. List of program "Performance Standards".**
Please refer to sections 1.10.1 and 1.10.2 below.

**1.10. List of program "Performance Indicators", designated by "benefits" and "risks."**

**1.10.1. "Performance Indicators" addressing benefits.**

Table 1.10.1. Performance Indicators addressing benefits.

| Performance Standard | Performance Indicator | Monitoring and Evaluation |
|---|---|---|
| Program provides harvest opportunity | Increased harvest | Estimate annual harvest |
| Satisfy legal harvest while eliminating impacts on wild populations | Developed harvest management plan | Adhere to FMEP |
| Achieve within-hatchery performance standards | Achievement of IHOT standards | Adhere to IHOT standards |

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### 1.10.2. "Performance Indicators" addressing risks.

Table 1.10.2 Performance indicators addressing risks

| Performance Standard | Performance Indicator | Monitoring and Evaluation |
|---|---|---|
| Not achieving within-hatchery performance standards | Achievement of IHOT standards | Adhere to IHOT standards. |
| Avoid disease transfer from hatchery to wild fish and vice versa. | Application of fish health standards | Adhere to fish health standards and policies |

## 1.11. Expected size of program.

### 1.11.1. Proposed annual broodstock collection level (maximum number of adult fish).

This program does not collect broodstock.

### 1.11.2. Proposed annual fish release levels (maximum number) by life stage and location.

Table 1.11.2.

| Life Stage | Release Location | Annual Release Level |
|---|---|---|
| **Yearling** | Youngs Bay, Tongue Point, Blind Slough, NF Klaskanine, SF Klaskanine | 3,745,000[1] |
| [1]The program may exceed the authorized goal by 10% annually (4,119,500) and 2% over any 5-year period (3,819,900) to account for variation during rearing. | | |

## 1.12. Current program performance, including estimated smolt-to-adult survival rates, adult production levels, and escapement levels. Indicate the source of these data.

Due to program objectives, only SAR and total harvest are included below.

Table 1.12. Smolt to adult survival (SAR) rates and total harvest rate[1.]

| Brood Year | Smolt-to-Adult Survival (%) | Total Harvest Rate (%) |
|---|---|---|
| **2009** | **0.45** | **83.8** |
| **2010** | **1.06** | **89.7** |
| **2011** | **4.75** | **91.5** |
| **2012** | **1.06** | **93.7** |

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| | | |
|---|---|---|
| **2013** | **0.59** | **91.0** |
| **2014** | **0.99** | **93.9** |
| **2015** | **0.43** | **91.3** |
| **2016** | **1.06** | **90.8** |
| **2017** | **0.80** | **88.3** |
| **2018** | **3.08** | **91.8** |
| **2019** | **1.84** | **86.9** |
| **2020** | **1.15** | **93.6** |

[1] Oregon Select Area sites only.
Data Source: HMS and Staff Records

**1.13. Date program started (years in operation), or is expected to start.**
Start dates vary by location with releases from Klaskanine Hatchery in the 1960s, South Fork Klaskanine Hatchery in 1977, and the net pen sites in 1993.

**1.14. Expected duration of program.**
Indefinite

**1.15. Watersheds targeted by program.**
Youngs Bay and the Columbia River Estuary.

**1.16. Indicate alternative actions considered for attaining program goals, and reasons why those actions are not being proposed.**
Alternative 1 – Increase program size (Not preferred)
Increased yearling releases could potentially increase fisheries, financial commitment, and impacts to listed species. This alternative is not preferred due to the increased cost and negative impact to listed species.

Alternative 2 – Reduce program size (Not preferred)
Decreased yearling releases could potentially decrease fisheries, financial commitment, and impacts to listed species. This alternative is not preferred due to the negative impact to fisheries.

## Section 2. PROGRAM EFFECTS ON NMFS ESA-LISTED SALMONID POPULATIONS. (USFWS ESA-LISTED SALMONID SPECIES AND NON-SALMONID SPECIES ARE ADDRESSED IN ADDENDUM A)

**2.1. List all ESA permits or authorizations in hand for the hatchery program.**
This program was evaluated under the SAFE Biological Opinion signed on 5/3/2021. This 2025 version is intended as re-submission for reinitiation of consultation.

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Programs that provide juveniles for release under the SAFE program are authorized by the Mitchell Act Biological Opinion signed on 12/30/2024.

## 2.2. Provide descriptions, status, and projected take actions and levels for NMFS ESA-listed natural populations in the target area.

### 2.2.1. Description of NMFS ESA-listed salmonid population(s) affected by the program.

**- Identify the NMFS ESA-listed population(s) that will be directly affected by the program.**
There are no NMFS ESA-listed salmonid populations directly affected by the program.

**- Identify the NMFS ESA-listed population(s) that may be incidentally affected by the program.**
Table 2.2.1.2 NMFS ESA-listed populations incidentally affected by the program.

| Life Stage | Activity | Affected NMFS ESA-listed Population |
|---|---|---|
| Juvenile | Ecological Competition | Columbia River Chum Salmon |
| | | Lower Columbia Chinook Salmon |
| | | Lower Columbia River Coho Salmon |
| | | Lower Columbia River Steelhead |
| | | Middle Columbia River Steelhead |
| | | Upper Columbia River Spring-run Chinook |
| | | Upper Columbia River Steelhead |
| | | Upper Willamette Chinook Salmon |
| | | Upper Willamette Steelhead |
| | | Snake River Spring/Summer-run Chinook Salmon |
| | | Snake River Fall-run Chinook Salmon |
| | | Snake River Sockeye Salmon |
| | | Snake River Basin Steelhead |

### 2.2.2. Status of NMFS ESA-listed salmonid population(s) affected by the program.

Due to the low likelihood that listed populations will be affected through ecological competition, lack of direct take, and independent authorizations for source programs, no assessments are presented here.

**2.2.3. Describe hatchery activities, including associated monitoring and evaluation and research programs, that may lead to the take of NMFS listed fish in the target area, and provide estimated annual levels of take.**

This program only results in take through immeasurable ecological competition. Therefore, no descriptions or incidental take table are provided here.

## Section 3. Relationship Of Program To Other Management Objectives

**3.1. Describe alignment of the hatchery program with any ESU-wide hatchery plan (e.g. *Hood Canal Summer Chum Conservation Initiative*) or other regionally accepted policies (e.g. the NPPC *Annual Production Review* Report and Recommendations - NPPC document 99-15). Explain any proposed deviations from the plan or policies.**

The hatchery program will be operated consistent with the Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead, ODFW's Native Fish Conservation Policy, and ODFW's Hatchery Management Policy.

**3.2. List all existing cooperative agreements, memoranda of understanding, memoranda of agreement, or other management plans or court orders under which program operates.**

N/A

**3.3. Relationship to harvest objectives.**

Juveniles released by this program are mass marked to facilitate selective harvest of hatchery fish.

**3.3.1. Describe fisheries benefitting from the program, and indicate harvest levels and rates for program-origin fish for the last twelve years (1988-99), if available.**

This program supports fisheries in the ocean and the lower Columbia River with a harvest level described in Table 1.12.

**3.4. Relationship to habitat protection and recovery strategies.**

Assumption regarding habitat conditions related to this program are that freshwater habitat is at capacity, production is not limited in other habitat for different life stages, and artificially produced populations can coexist without jeopardizing the fitness of natural populations. Considering these assumptions, this program rears juveniles from egg to yearling in a hatchery setting to avoid impacting freshwater habitat availability. Those juveniles are then released at optimized times to emigrate and utilize more available habitat, ultimately minimizing impacts to habitat.

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**3.5. Ecological interactions. [Please review Addendum A before completing this section. If it is necessary to complete Addendum A, then limit this section to NMFS jurisdictional species. Otherwise complete this section as is.]**

Listed fish have potential to both negatively impact and be negatively impacted by the program through competition for resources and attraction of predators. Listed fish in the area may positively impact and be positively impacted by the program through increased nutrient cycling and the subsequent increase in production potential of surrounding habitats.

## Section 4. WATER SOURCE

**4.1. Provide a quantitative and narrative description of the water source (spring, well, surface), water quality profile, and natural limitations to production attributable to the water source.**

Klaskanine Hatchery – 50 cfs are authorized from North Fork Klaskanine and the North Fork of North Fork Klaskanine. Operation and discharge are authorized under a NPDES permit.

SF Klaskanine Hatchery – Up to 10 cfs are authorized from an unnamed tributary of the South Fork Klaskanine. Operation and discharge are authorized under a NPDES permit.

**4.2. Indicate risk aversion measures that will be applied to minimize the likelihood for the take of listed natural fish as a result of hatchery water withdrawal, screening, or effluent discharge.**

Hatcheries adhere to water right and NPDES permit.

## Section 5. FACILITIES

**5.1. Broodstock collection facilities (or methods).**

This program does not collect broodstock.

**5.2. Fish transportation equipment (description of pen, tank truck, or container used).**

Juvenile and adult transportation is performed by liberation trucks or portable liberation tanks. Liberation trucks are typically 1,000–2,500-gallon capacity units, either mounted on a large flatbed or tanker style truck. The trucks are equipped with oxygen diffusing systems, water re-circulation pumps, and dissolved oxygen meters. Portable liberation tanks have a capacity of 300 gallons and are equipped with oxygen diffusion systems. The transfer of juvenile fish on station is performed using a distribution box, irrigation pipe and a gas-powered water pump. Eggs and milt are transported via passenger vehicles in small, covered containers.

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**5.3. Broodstock holding and spawning facilities.**
This program does not hold or spawn broodstock.

**5.4. Incubation facilities.**
This program does not incubate eggs.

**5.5. Rearing facilities.**
This program does not rear juveniles.

**5.6. Acclimation/release facilities.**
Juveniles are acclimated at Klaskanine and South Fork Klaskanine hatcheries as well as the Youngs Bay, Tongue Point, and Blind Slough net pens.

**5.7. Describe operational difficulties or disasters that led to significant fish mortality.**
Significant fish mortality could occur due to human error, disease outbreaks, intake failure, high stream flows, drought, high temperatures, low temperatures, wildfire, or various other natural disasters.

**5.8. Indicate available back-up systems, and risk aversion measures that will be applied, that minimize the likelihood for the take of listed natural fish that may result from equipment failure, water loss, flooding, disease transmission, or other events that could lead to injury or mortality.**
Hatchery juveniles in this program are not listed, therefore rearing and acclimation are not expected to result in the take of listed natural fish.

## Section 6. BROODSTOCK ORIGIN AND IDENTITY

This program does not collect or spawn broodstock. Source programs are authorized under the Mitchell Act Biological Opinion.

## Section 7. BROODSTOCK COLLECTION

This program does not collect or spawn broodstock. Source programs are authorized under the Mitchell Act Biological Opinion.

## Section 8. MATING

This program does not collect or spawn broodstock. Source programs are authorized under the Mitchell Act Biological Opinion.

## Section 9. INCUBATION AND REARING

This program does not incubate eggs or rear juveniles. Source programs are authorized under the Mitchell Act Biological Opinion.

## Section 10. RELEASE

**Describe fish release levels, and release practices applied through the hatchery program**.

### 10.1. Proposed fish release levels.

Table 10.1 Proposed coho release levels for Oregon Select Area sites.

| Age Class | Maximum Number | Size (fpp) | Release Date | Location |
|---|---|---|---|---|
| **Yearling** | 3,745,000[1] | 10 – 17 | March - May | Youngs Bay, Tongue Point, Blind Slough, NF Klaskanine, SF Klaskanine |
| [1]The program may exceed the authorized goal by 10% annually (4,119,500) and 2% over any 5-year period (3,819,900) to account for variation during rearing. | | | | |

### 10.2. Specific location(s) of proposed release(s).

**Stream, river, or watercourse:** Youngs Bay
**Release point:** Net Pens
**Major watershed:** RM 11
**Basin or Region:** Lower Columbia River/Estuary

**Stream, river, or watercourse:** Tongue Point
**Release point:** Net Pens
**Major watershed:** RM 18
**Basin or Region:** Lower Columbia River/Estuary

**Stream, river, or watercourse:** Blind Slough
**Release point:** Net Pens
**Major watershed:** RM 27
**Basin or Region:** Lower Columbia River/Estuary

**Stream, river, or watercourse:** North Fork Klaskanine River
**Release point:** North Fork Klaskanine River and tributaries
**Major watershed:** RM 2.25
**Basin or Region:** Lower Columbia

**Stream, river, or watercourse:** South Fork Klaskanine River

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**Release point:** South Fork Klaskanine River and tributaries
**Major watershed:** RM 3.6
**Basin or Region:** Lower Columbia

## 10.3. Actual numbers and sizes of fish released by age class through the program.

Table 10.3. Program releases[1].

| Release Year | Juveniles | Average Size (fpp) |
|---|---|---|
| 2012 | 2,500,739 | 13.4 |
| 2013 | 3,200,121 | 13.5 |
| 2014 | 3,396,621 | 13.5 |
| 2015 | 3,352,661 | 13.5 |
| 2016 | 3,945,158 | 13.9 |
| 2017 | 3,343,385 | 14.0 |
| 2018 | 4,374,647 | 15.0 |
| 2019 | 3,185,053 | 14.3 |
| 2020 | 3,429,725 | 13.9 |
| 2021 | 3,621,851 | 13.7 |
| 2022 | 2,959,904 | 12.7 |
| 2023 | 3,565,128 | 13.7 |
| 2024 | 3,189,941 | 14.6 |
| **Average** | **3,389,610** | **13.8** |

[1] Oregon Select Area sites only.
Data Source: HMS

## 10.4. Actual dates of release and description of release protocols.

Table 10.4. Annual release dates[1].

| Release Year | Release Date Range |
|---|---|
| 2012 | 4/16 – 4/27 |
| 2013 | 4/7 – 5/7 |
| 2014 | 4/14 – 5/12 |
| 2015 | 4/12 – 5/13 |
| 2016 | 4/13 – 5/5 |
| 2017 | 4/19 – 5/8 |
| 2018 | 4/10 – 5/21 |
| 2019 | 4/16 – 4/30 |
| 2020 | 4/16 – 5/7 |
| 2021 | 4/13 – 5/4 |
| 2022 | 4/12 – 5/10 |
| 2023 | 4/4 – 5/5 |

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| | |
|---|---|
| 2024 | 4/5 – 5/7 |

[1] Oregon Select Area sites only.
Data Source: HMS

**10.5. Fish transportation procedures, if applicable.**
All juveniles are transported in liberation equipment described above.

**10.6. Acclimation procedures (methods applied and length of time).**
Juveniles are acclimated for a period of two weeks to six months, depending on the location and release group.

**10.7. Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**
The program goal is to mass mark 100% of juveniles with an adipose fin clip and majority of the juveniles retain their marks. A portion of the juveniles will receive coded-wire tags. Alternative marking may be used if necessary.

**10.8. Disposition plans for fish identified at the time of release as surplus to programmed or approved levels.**
Under current policy, surplus juveniles are destroyed or marked and released into a closed water system such as a lake, reservoir or pond where they contribute to angling opportunities. In general, OAR 635-007-0545 directs disposition of surplus hatchery juveniles.

**10.9. Fish health certification procedures applied pre-release.**
The fish health monitoring plan is based on the Integrated Hatchery Operations Team for the Columbia Basin Anadromous Salmonid Hatcheries (see Policies and Procedures for the Columbia Basin Anadromous Salmonid Hatcheries, Annual Report 1994. Bonneville Power Administration) and the ODFW Fish Health Management Policy (OAR 635-007-0960 to 635-007-0995). Other resources are used to guide the program and management of diseases such as American Fisheries Society Fish Health Section Blue Book and the World Organisation for Animal Health Manual of Diagnostic tests for Aquatic Animals.

**10.10. Emergency release procedures in response to flooding or water system failure.**
Emergency releases may occur at any size or point in time during rearing in response water system failure, disease, drought, wildfire, flood, rising air/water temperatures, or any other adverse environmental conditions that may pose a threat to hatchery staff and/or hatchery fish.

Emergency releases will occur after the hatchery crew has exhausted all possibilities for retaining the fish and consulted with the ODFW District Biologist. Emergency releases

will be limited to the Columbia basin, or into a closed water body per OAR 635-007-0545.

**10.11. Indicate risk aversion measures that will be applied to minimize the likelihood for adverse genetic and ecological effects on listed fish resulting from fish releases.**
Juveniles are generally released at times and sizes that minimize potential interactions in the estuary.

## Section 11. Monitoring And Evaluation Of Performance Indicators

**11.1. Monitoring and evaluation of "Performance Indicators" presented in Section 1.10.**

**11.1.1. Describe plans and methods proposed to collect data necessary to respond to each "Performance Indicator" identified for the program.**

Table 11.1.1. Methods for evaluating program indicators.

| Performance Indicator M&E | Methods |
|---|---|
| Estimate annual harvest | Query harvest card and ELS data |
| Adhere to IHOT standards | N/A |
| Adhere to fish health standards and policies | N/A |

**11.1.2. Indicate whether funding, staffing, and other support logistics are available or committed to allow implementation of the monitoring and evaluation program.**
Current funding is sufficient to implement the activities identified in 11.1.1. Any additional monitoring or evaluations would require additional funding/staffing.

**11.2. Indicate risk aversion measures that will be applied to minimize the likelihood for adverse genetic and ecological effects on listed fish resulting from monitoring and evaluation activities.**
Please see Section 12.

## Section 12. Research

This program does not currently have a research nexus.

## Section 13. Attachments And Citations

AFS-FHS (American Fisheries Society-Fish Health Section). 2014. FHS blue book: suggested procedures for the detection and identification of certain finfish and shellfish pathogens, 2020 edition. Accessible at: https://units.fisheries.org/fhs/fish-health-section-blue-book-2020/

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IHOT (Integrated Hatchery Operations Team). 1996. Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin. Volume II-Oregon. Annual Report 1995. Portland, OR. Project Number 92-043, Contract Number DE-BJ79-91BP60629.

NMFS. 2021. Endangered Species Act Section 7(a)(2) Reinitiated Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation. Select Area Fisheries Enhancement (SAFE) Spring Chinook and Coho Salmon Programs. May 3, 2021. NMFS Consultation No.: WCRO-2020-02145. 172p.

NMFS. 2024. Endangered Species Act Section 7(a)(2) Reinitiated Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response. NOAA's National Marine Fisheries Service's Continued Implementation of the Mitchell Act FEIS Preferred Alternative and Administration of the Mitchell Act hatchery funding. December 30, 2024. NMFS Consultation No.: WCRO-2024-03014. 680p.

ODFW. 2010a. Final Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead. August 6, 2010. 437p.

Oregon Administrative Rules (OAR 635-007- -0542 through -0548). 2003. Fish Health Management Policy. Oregon Department of Fish and Wildlife, Salem, OR.

Oregon Administrative Rules (OAR 635-007-0960 through 1000). 2003. Fish Health Management Policy. Oregon Department of Fish and Wildlife, Salem, OR.

Oregon Administrative Rules (OAR 635-007-050 2 through -0509). 2002. Native Fish Conservation Policy. Oregon Department of Fish and Wildlife, Salem, OR.

World Organisation for Animal Health (OIE). (2024). Manual of Diagnostic Tests for Aquatic Animals, eleventh editions 2024. Available at: https://www.woah.org/en/what-we-do/standards/codes-and-manuals/aquatic-manual-online-access/

## Section 14. Certification Language And Signature Of Responsible Party

"I hereby certify that the information provided is complete, true and correct to the best of my knowledge and belief. I understand that the information provided in this HGMP is submitted for the purpose of receiving limits from take prohibitions specified under the Endangered Species Act of 1973 (16 U.S.C.1531-1543) and regulations promulgated thereafter for the proposed hatchery program, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or penalties provided under the Endangered Species Act of 1973."

*Name, Title, and Signature of Applicant:*

Certified by_____ Date:_____

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**Attachment 1. Age class designations by fish size and species for salmonids released from hatchery facilities.**
**(generally from Washington Department of Fish and Wildlife, November 1999)**

| | Species/Age Class | Size Criteria | |
|---|---|---|---|
| | | Number of fish/pound | Grams/fish |
| X | Chinook Yearling | <=20 | >=23 |
| X | Chinook (Zero) Fingerling | >20 to 150 | 3 to <23 |
| X | Chinook Fry | >150 to 900 | 0.5 to <3 |
| X | Chinook Unfed Fry | >900 | <0.5 |
| X | Coho Yearling [1] | <20 | >=23 |
| X | Coho Fingerling | >20 to 200 | 2.3 to <23 |
| X | Coho Fry | >200 to 900 | 0.5 to <2.3 |
| X | Coho Unfed Fry | >900 | <0.5 |
| X | Chum Fed Fry | <=1000 | >=0.45 |
| X | Chum Unfed Fry | >1000 | <0.45 |
| X | Sockeye Yearling [2] | <=20 | >=23 |
| X | Sockeye Fingerling | >20 to 800 | 0.6 to <23 |
| X | Sockeye Fall Releases | <150 | >2.9 |
| X | Sockeye Fry | > 800 to 1500 | 0.3 to <0.6 |
| X | Sockeye Unfed Fry | >1500 | <0.3 |
| X | Pink Fed Fry | <=1000 | >=0.45 |
| X | Pink Unfed Fry | >1000 | <0.45 |
| X | Steelhead Smolt | <=10 | >=45 |
| X | Steelhead Yearling | <=20 | >=23 |
| X | Steelhead Fingerling | >20 to 150 | 3 to <23 |
| X | Steelhead Fry | >150 | <3 |
| X | Cutthroat Trout Yearling | <=20 | >=23 |
| X | Cutthroat Trout Fingerling | >20 to 150 | 3 to <23 |
| X | Cutthroat Trout Fry | >150 | <3 |
| X | Trout Legals | <=10 | >=45 |
| X | Trout Fry | >10 | <45 |

[1] Coho yearlings defined as meeting size criteria and 1 year old at release, and released prior to June 1st.
[2] Sockeye yearlings defined as meeting size criteria and 1 year old.

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