

2019 Pre-season Forecasts Current Columbia River Basin Steelhead and Salmon Migration.

Table of forecasts and actual runs to the Columbia River mouth (CRM) or the forecast or actual count to Bonneville Dam (BON) with comparison to recent ten-year averages (TYA)¹.

Columbia River Steelhead - Overview

Columbia River (CR) steelhead populations are historically diverse, likely returning year-round. Yet they are divided administratively by date, and by length - into three main components:

-Winter Steelhead: Returning between Nov 1 and March 30

-Early Summer Steelhead (aka 'Skamania'): April 1 thru June 30
-Upriver Summer Steelhead: July 1 through October 31

A-run: adults <30" July 1 thru October 31 B-run: adults >31" August 1 thru November

Early Summer Steelhead: April 1 thru June 30

These are summer Steelhead bound for Washington tributaries below BON, as well as the Wind, White Salmon, Hood, and Klickitat Rivers, including Fifteenmile Creek.

2019 Early Summer Steelhead Forecast to BON: 8,750 (71% of the TYA)

2019 actual early summer steelhead past BON: 3,134 (TYA is 11,346) (27.6% of the TYA)

2019 **forecast of wild** early summer steelhead to BON: 3,200 (83% of the TYA of 3,875) 2019 **actual early wild** summer steelhead past BON: 1,639 (40.5% of TYA of 4050)

Notes:

- CR early summer steelhead have been given the label "Skamania-stock" which is a reference to the hatchery broodstock that has been cultivated for decades and raised and released in multiple lower CR tributaries including the Upper Willamette.
- 2. Wild early summer steelhead are common in the Southwestern Washington rivers but are not native to any Oregon tributaries below Bonneville Dam.

Columbia River Summer Steelhead Past Bonneville: July 1 – August 15:

Steelhead are bound for the Klickitat, Deschutes, John Day, Umatilla, and other rivers in the Upper Columbia and Snake Basins such as the Grand Ronde, Clearwater, Salmon and Imnaha.

2019 Total Forecast for Upriver Summer Steelhead: 118,200 total A & B-run (38% of TYA of 315,202)

2019 Pre-season Forecast for A-run CR Steelhead past BON: 110,200 (hatchery and wild) 2019 Pre-season Forecast for B-run CR Steelhead past BON: 8,000 (hatchery and wild)

2019 Pre-season Forecast for **wild A-run** CR Steelhead past BON: 33,900 2019 Pre-season Forecast for **wild B-run** CR Steelhead past BON: **950**

Current Total Summer Steelhead Past BON (July 1 – August 15): 40,080 (27.1% of the TYA) **Current Wild** Summer Steelhead Past BON (July 1 – August 15): 23,091 (37.4% of the TYA)

Notes:

- 1. 2019 count is 19.4% of best TYA (2001-2010), wild return is 32% of best TYA (2001-10)
- 2. Wild CR Steelhead have outnumbered hatchery steelhead all summer.
- 3. The only open sport fisheries in the CR between April and August have been for steelhead.
- 4. The states have announced "rolling closures" where even retention of hatchery steelhead is prohibited, but fishing is still permitted.

¹ While Ten-Year Averages (TYA) may be instructive, they have limited value because they hide longer-term trends, thus contributing to the "shifting baseline" allowing managers to mask the loss of abundance and diversity.

Columbia River Chinook - Overview

Columbia River (CR) chinook stocks are a very diverse species, with river-specific populations returning year-round. Yet for 40 years, they are divided by date into three components and specific populations have been aggregated to facilitate harvest and hatchery broodstock needs.

-Spring Chinook: Returning from January 1 thru June 15

-Summer Chinook: June 15 thru July 31 August 1 thru December 31 -Fall Chinook:

2019 Spring Chinook Forecast to the Columbia R. Mouth: 58% of the TYA

Spring Chinook forecast to CRM: 157,500 (hatchery & wild) (Forecast was 58.4% of TYA)

TYA for spring chinook to CRM: 269,575 (hatchery & wild)

Spring chinook past BON (Jan – June 15): 80,327 (adults and jacks) TYA for spring chinook to BON: 212,028 (adults and jacks)

Notes:

1. The 2019 actual Spring Chinook return was 38% of the TYA.

- 2. Spring Chinook are closely followed by Summer Chinook bound for the Snake and Upper Columbia, with a June 15 cut-off date determining the difference between Spring and Summer Chinook.
- 3. Lower CR Sport and Select Area harvest is authorized and sometimes even completed before the run numbers are updated in May.
- 4. These are hatchery and wild chinook bound for the Snake, and to Mid- and Upper Columbia River tributaries. Mid-Columbia springers are not an ESA-listed species as they are lumped together with more abundant Mid-Columbia Fall chinook.

Columbia River Summer Chinook: 49% of TYA to the CRM

Summer Chinook pass BON between June 15 and August 1

2019 Summer Chinook Forecast to CRM: 36,340 adults (49% of TYA to CRM - 73,922 adults) 2019 Summer Chinook Past BON: 35,705 adults (98% of PSF, 51% of TYA – 70,336)

Notes:

- 1. Managers accurately predicted summer chinook returns in 2019.
- Summer chinook were harvested at a 37% rate in 2018.

Columbia River Fall Chinook:

CR Fall chinook include ESA-listed Snake and Upper Columbia Fall Chinook, as well as unlisted Mid-Columbia Fall Chinook heading to the Deschutes, Umatilla, Yakima and Hanford Reach.

-2019 CRM Fall Chinook Forecast: 349,600 adults and jacks -Upriver Bright Wild Fall Chinook Forecast: 159,200 adults and jacks -Snake River (SR) Wild Fall Chinook Forecast: 8.600 adults and iacks -SR Wild Fall Chinook estimated to pass BON: 8,050 adults and jacks

-SR Wild Fall Chinook estimated to reach Idaho: 5,525

-Historic SR Fall Chinook Abundance: ~in the millions of adults and jacks 2019 Harvest Rate on ESA-listed SR Fall Chinook: 36.6% (Guideline is 38.25%)

14,691 adults and jacks (57% of TYA) -Current Fall Chinook past BON (8/1-8/15):

<u>Columbia and Snake River Sockeye</u>: Columbia sockeye are almost all wild fish bound for the Upper Columbia, with small numbers heading to the Deschutes, Yakima and Snake. Only the Snake sockeye are ESA-listed.

2019 forecast to the CRM: 94,400 (29.5% of the TYA)

TYA of Sockeye Salmon to the CRM: 328,602 Sockeye

2019 Sockeye Salmon Past BON: 62,784 (66.5% of 2019 forecast) (20% of TYA)

Notes:

- 1. Sockeye harvest was only permitted by Treaty Tribes who landed ~3,200 in Zone 6 (5%)
- 2. Sport and non-treaty fishing were closed in 2019.