December 1, 2021

To: Distribution

Re: Status Update for Fraser River Late-Run Summer Steelhead

Catches of steelhead in test fisheries suggest that Fraser River late-run summer steelhead stocks are at extremely low levels of abundance and in a state of **Extreme Conservation Concern**.

There is a **98%** chance that the status will be classified as an Extreme Conservation Concern. Conservation classifications are described in the Provincial Framework for Steelhead Management in BC (2016) and supporting technical documents.

Fraser River late-run summer steelhead is a group of stocks comprised of 10 spatially discrete spawning stocks distributed in the Fraser watershed upstream of Hell's Gate. The aggregate commonly referred to as "Thompson and Chilcotin Steelhead" comprises 7 out of these 10 spawning stocks. The current spawning population forecast for the **Thompson** watershed is **68** and the current spawning population forecast for the **Chilcotin** watershed is **32**. The forecast for the Thompson represents the lowest observed over a 45-year monitoring time frame. The forecast for the Chilcotin represents the second lowest over a 51-year monitoring time frame.

The aggregate run of Thompson, Chilcotin, and other Fraser River late-run summer steelhead stocks occurs over about a 12-week period and normally peaks in the Johnstone Straits and in Juan de Fuca Strait in late September. In the lower Fraser test fishing area

Ministry of Forests, Lands and Natural Resource Operations

Thompson Okanagan Region

Telephone: (250) 371-6200
Facsimile: (250) 828-4000

Mailing Address & Location:
1259 Dalhousie Drive,
Kamloops, B.C.
V2C 5Z5

near Fort Langley, the run normally begins in late August and continues into the latter half of November, peaking around October 10.

This report concludes a series of 7 reports issued over the course of October and November on the status of Fraser River Late-Run Summer Steelhead. An update will be provided in the summer of 2022 following the completion of population abundance assessments in the spawning areas.

Robert Bison
Fisheries Stock Assessment Biologist
Fish & Wildlife Branch

For your information, the following data are attached:

List of Figures:

Figure 1.   The estimated spawning abundances of Thompson River steelhead in relation to conservation reference points. The last data point illustrates the expected spawner abundance for this season's return which will spawn in the spring of 2022.

Figure 2.   The estimated spawning abundances of Chilcotin River steelhead in relation to conservation reference points. The last data point illustrates the expected spawner abundance for this season's return which will spawn in the spring of 2022.

Figure 3. Observed catches of steelhead in the Albion chum and chinook test fisheries to date, illustrated by the diamonds and squares, respectively. The lines illustrate the "average" pattern expected for the balance of the season, given the observed catches to date, the historical data on run timing, and the historical data on the steelhead catching efficiency of the two gillnets.

Figure 4. Patterns of daily catch of steelhead in the chinook (filled points) and chum test fisheries (unfilled points) in the 4 years of highest steelhead abundance. Year labels indicate the test fishing year rather than the spawning year. Data from September 1 to November 20 are plotted to ensure that early-run summer steelhead and winter run steelhead are not included.
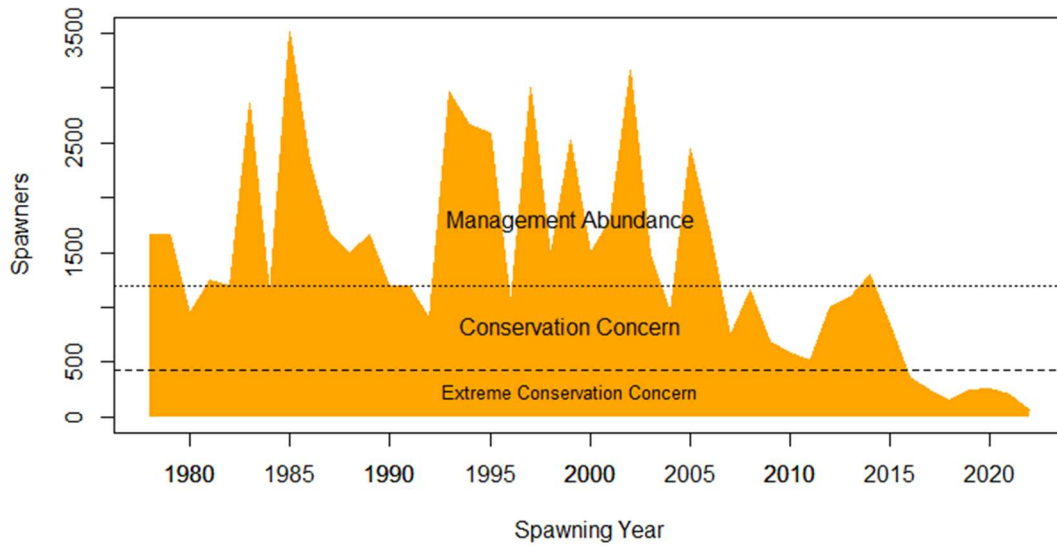
Figure 1. The estimated spawning abundances of Thompson River steelhead in relation to conservation reference points. The last data point illustrates the expected spawner abundance for this season's return which will spawn in the spring of 2022.
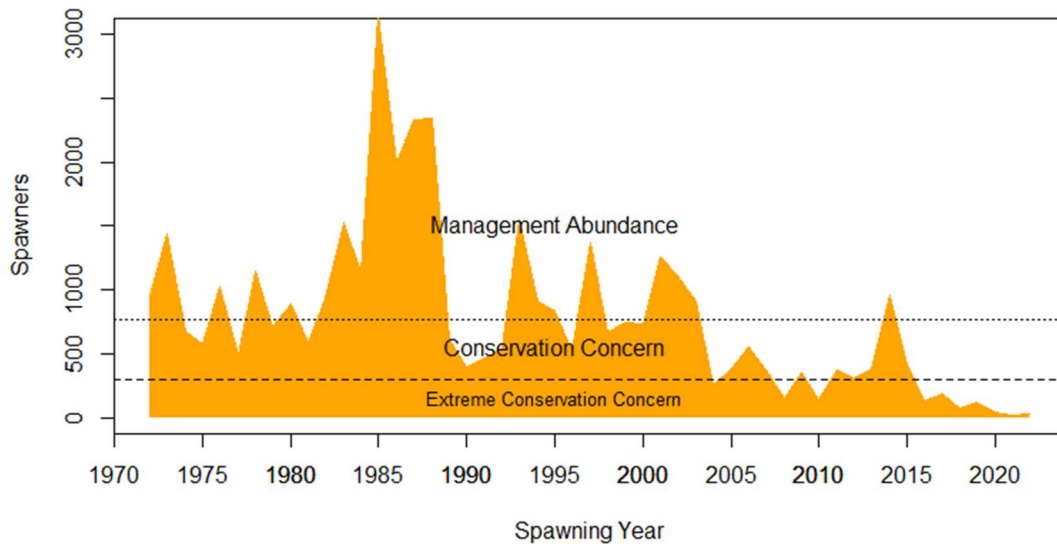

Figure 2. The estimated spawning abundances of Chilcotin River steelhead in relation to conservation reference points. The last data point illustrates the expected spawner abundance for this season's return which will spawn in the spring of 2022.
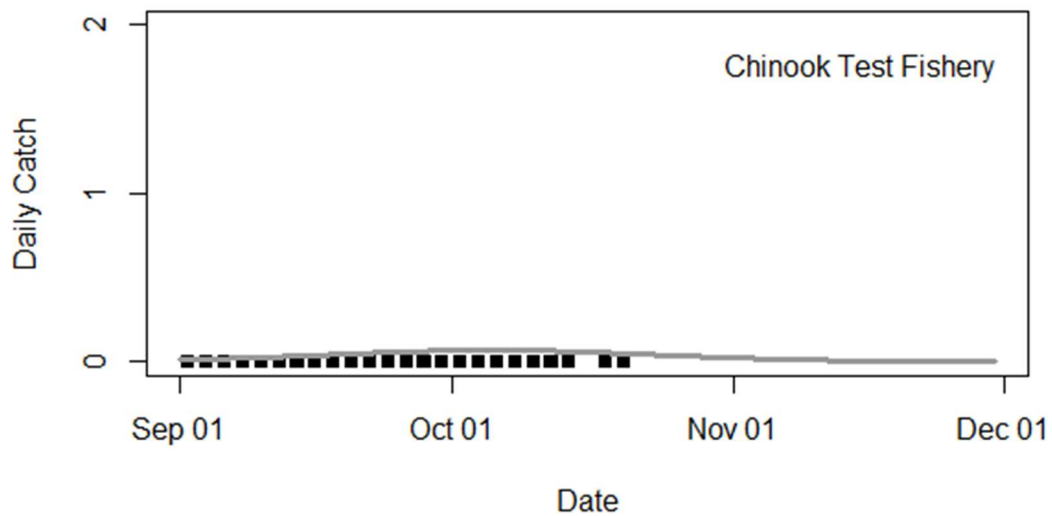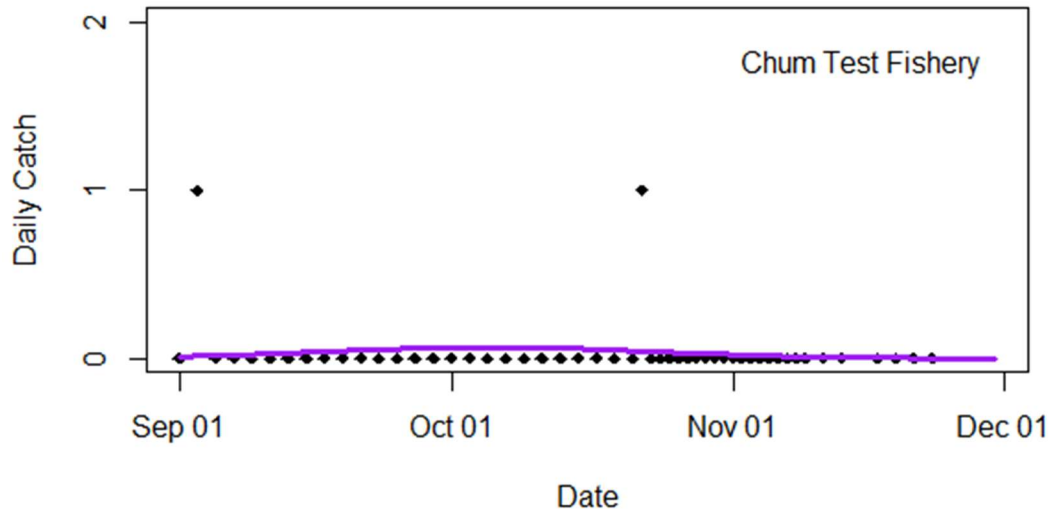
Figure 3. Observed catches of steelhead in the Albion chum and chinook test fisheries to date, illustrated by the diamonds and squares, respectively. The lines illustrate the "average" pattern expected for the balance of the season given the observed catches to date, the historical data on run timing, and the historical data on the steelhead catching efficiency of the two gillnets.
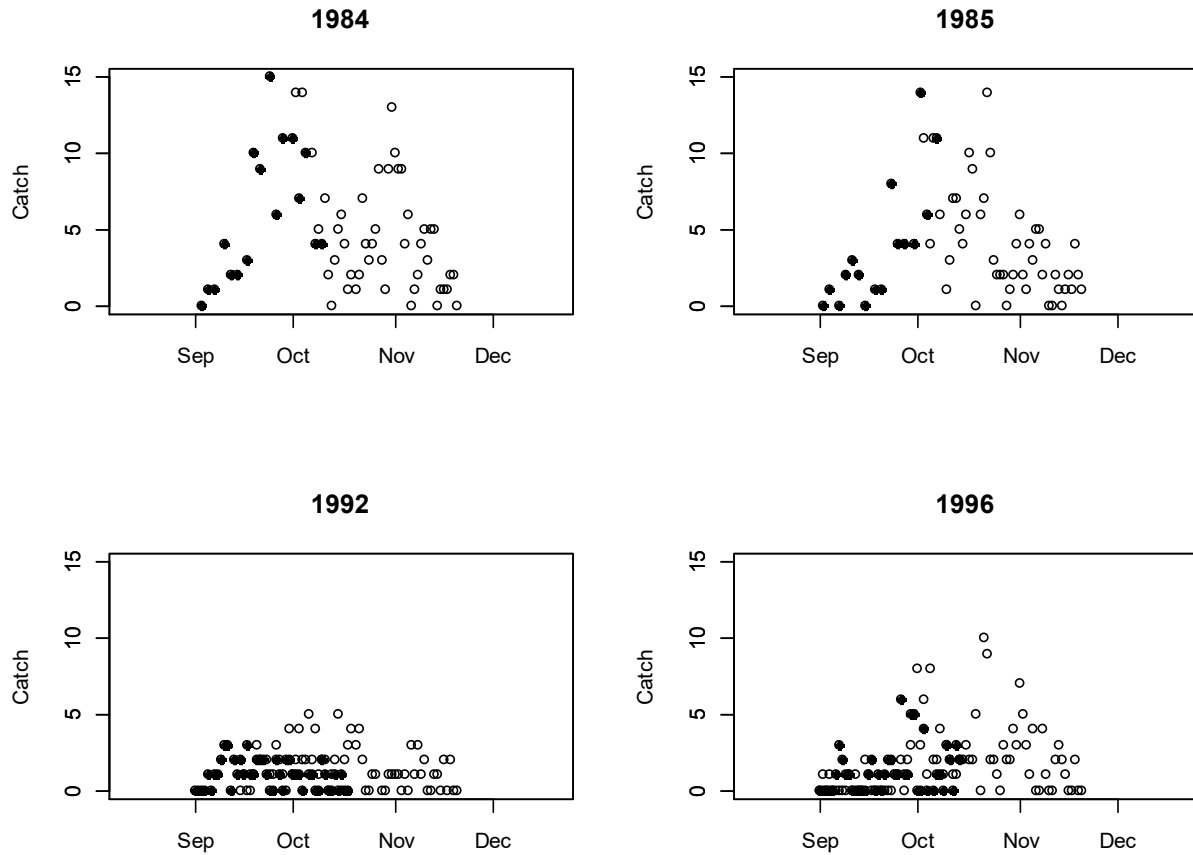
Figure 4. Patterns of daily catch of steelhead in the chinook (filled points) and chum test fisheries (unfilled points) in the 4 years of highest steelhead abundance. Year labels indicate the test fishing year rather than the spawning year. Data from September 1 to November 20 are plotted to ensure that early-run summer steelhead and winter run steelhead are not included.