



2022 Fraser Sockeye

Management Issues and Key Considerations

Presented to: FSMC Forum

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March 2, 2022



Photo by Maxime Veilleux

Presentation Outline

- 1) Early Stuart Window Closure
- 2) Run Timing Considerations
- 3) Other Considerations
- 4) Cultus Lake Sockeye

Sockeye Window Closure Proposed Dates

- In some marine areas, the window closure must also take into consideration the timing of Sakinaw Sockeye.
- In some years (2020,2021), a one-week extension is added on to the Early Stuart closure with the aim of providing some protection to earlier returning Early Summer Sockeye (e.g., Bowron and Taseko).

Do you have any advice on how long the window closure should be to protect Early Stuart and potentially Early Summer Sockeye in 2022?

Proposed Window Closure Dates

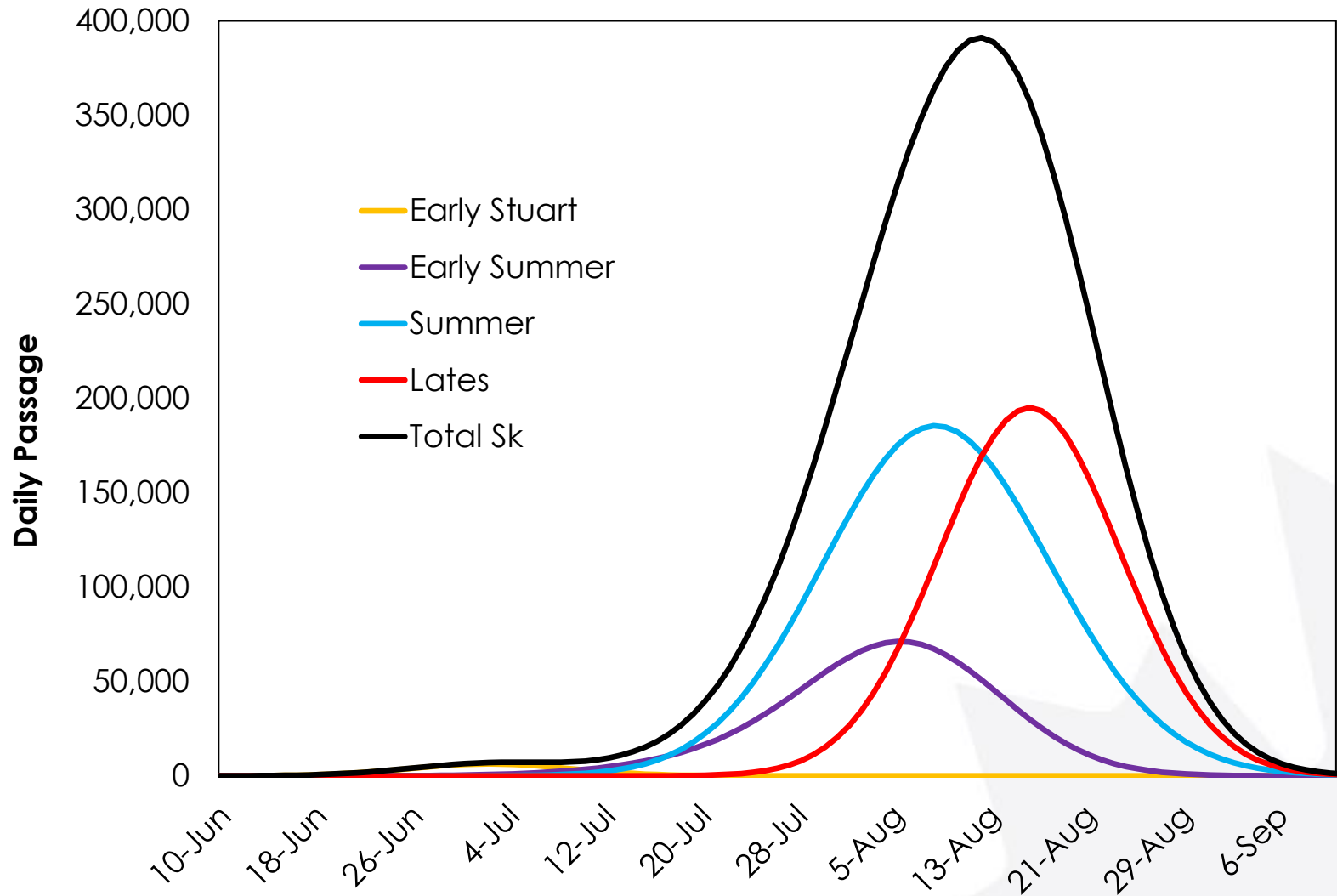
Areas	Start Date	End Date ~3 Weeks	End Date ~4 weeks
Areas 11 to 17, 19 to 21, 121 and 123 to 127	June 19	July 15	July 22
Areas 18 and 29	June 28	July 21	July 27
Steveston to Mission	June 28	July 21	July 27
Mission to Sawmill	June 30	July 23	July 29
Sawmill to Deadman	July 3	July 25	Aug 1
Deadman-Hixon	July 8	July 30	Aug 6
Hixon to Prince George	July 11	Aug 2	Aug 9
Prince George to Stuart River	July 13	Aug 4	Aug 11

Note: Actual dates may be adjusted based on in-season run timing information.

Sockeye Run Timing Considerations

- Likely considerable overlap between different Sockeye run timing groups.
- Early Stuart → directed harvest opportunities unlikely.
- Early Summer and Summer Runs → directed harvest opportunities likely at p25 or above.
- Cultus considerations → Not expected to meet objectives. Will be managed depending on escapement plan options and IFMP feedback.
- Potential constraints due to management actions for other species (e.g., Chinook, SRKW, IFR Coho, IFR Steelhead).

Sockeye Run Timing Considerations



Key Considerations

- Forecast model selection deviated slightly from past forecasts in order to attempt to align more closely with recent productivity.
- 2022 is an Adam's dominant return year.
 - Escapement options may be a tool when considering protection of weak stocks within the aggregates while considering some level of harvest.
- Environmental conditions and stocks that migrate above Big Bar slide.
- Timing overlaps between stock management groups and other species (Chinook FSC fisheries).
- Early Stuart window closure: 3 or 4 weeks.
- If returns are very poor, all management units could be in a LAER for 2022.

Key Considerations- Cultus Lake

- Summer and Late Run fisheries may be constrained by Cultus Lake Sockeye.
- In recent years, Cultus Lake Sockeye have been managed in 2 ways:
 - Off-cycle years: max. allowable ER was the greater of:
 - a) LAER identified for Late Run Sockeye, or
 - b) ER that is consistent with continued rebuilding of population based on in-season information on returns and potential numbers of effective spawners.
 - 2018 (dominant year): Cultus ER to be managed in-line with the Late Run ER.
 - 2022: broodstock removal target is 200 fish.

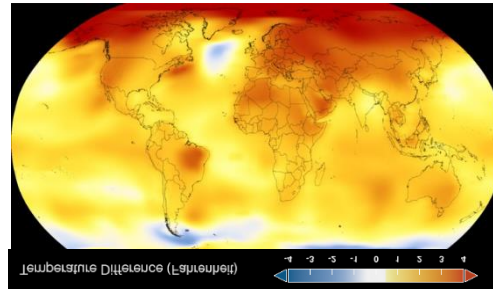
Questions?



Photo by Maxime Veilleux

EXTRA SLIDES

Environmental Considerations



Data source:
NASA/GISS
Credit: NASA
Scientific
Visualization
Studio

- General warming trend
- 2016 – 2018 freshwater conditions → generally neutral, unknown impacts of forest fires
- 2017 – 2019 marine conditions → generally negative, heat waves and poor food quality (zooplankton).
- 2021 head dome and flooding.
- Environmental impacts on 2022 Fraser Sockeye survival are likely negative

