



# 2013 CHINOOK and COHO MANAGEMENT ISSUES

Forum on Conservation and Harvest  
Planning February 2013



## Outline

- Southern BC Chinook Outlook
- 2013/14 Chinook Planning Considerations
- Spring and Summer 5-2 Chinook Changes
- Southern BC Coho Outlook
- Interior Fraser Coho Management



## Southern BC Chinook

- Fraser Spring 4<sub>2</sub>: *stock of concern*; expectations for continued low abundance levels resulting from persisting poor smolt to adult survival rates and very depressed spawning populations in 2009.
- Fraser Spring 5<sub>2</sub> and Summer 5<sub>2</sub> : *stock of concern*; continue to exhibit very low escapements, suggesting persistence of unfavourable marine conditions. Parental brood escapement levels for these units were very low but higher than for 2012 return year.
- Fraser Summer 4<sub>1</sub> (South Thompson): *low to near target*. Parental spawner abundance was above 80,000, however, highly uncertain in outlook due to the low return observed in 2012



## Southern BC Chinook

- Fraser Late (Harrison): *low to near target*, quantitative forecast in March.
- WCVI wild: *stock of concern*. Wild populations have either been well below target and/or declining for several generations
- Cowichan chinook: *low*. Cowichan jack returns in 2012 are lower than last two years suggesting that the rebuilding seen recently is slowing.
- AABM Forecasts and coded wire tag (CWT) based total mortality distributions available in late March / early April



## 2013/14 Chinook Fishery Planning

- Management measures for chinook stocks of concern including range of restrictions and/or closures developed and implemented in recent years continue to be required in 2013.
- **NEW:** Proposed change for current Fraser Spring 5<sub>2</sub> and Summer 5<sub>2</sub> chinook management zones reference points of 30K (zone 1-2 transition) and 60K (zone 2-3 transition).
- Summer 4-1 outlook is changed to a 2-3 from an outlook of a 4 in 2012.
- Southern BC Chinook Strategic Planning process may inform management plan development beginning in 2014 season.



## SS 5-2 Chinook

- A post-season review of the 2012 Fraser Spring and Summer 5-2 chinook management zone breakpoints of 30K and 60K highlighted a need to make changes in 2013.
- The new breakpoints between the management zones have been changed to 45,000 (Zone 1-2) and 85,000 (Zone 2-3) chinook returning to the Fraser River.



## SS 5-2 Chinook

The following reasons were considered when making the changes:

- The previous breakpoints did not align with spawner expectations identified for each of the zones and did not fully account for in-river harvest. The average in-river harvest rate from 2000 to 2006 (base period used for discussion last year) was 22% based Fraser River Run reconstruction model.
- There is a 17% uncertainty in the regression equation used to generate the run size. For 2103, the buffer has been incorporated into the breakpoints for direct comparison with Albion test fishery estimates.



## SS 5-2 Chinook

- The proposed lower run size reference point of 45K better aligns with the historical range of data used in the Albion CPUE vs. terminal return to the Fraser regression model.
- The management actions planned for each zone in 2012 are proposed to remain the same for this year. While there were discussions with First Nations on fisheries plans for zone 1 in 2012, plans were not finalized as the management approach for zone 2 was implemented inseason. Additional discussion is required to confirm actions for zone 1. Specific actions for the commercial and recreational fisheries were developed for Zone 1 which will remain the same for the 2013 fishing season.





# COHO



## Southern BC Coho

- Interior Fraser, Georgia Strait and Lower Fraser coho continue to be stocks of concern or low abundance (Outlook Status 1/2)
- Plan for a similar management approach to recent years – Canadian fishery exploitation rates not to exceed 3%.
- Window closure in the Fraser River to protect coho starting in the Fraser River after Labour Day (Sept. 2, 2012). Selective fishing techniques required.
- Requests for science advice to review Interior Fraser coho status and enhancement strategies and mark selective fisheries for coho in southern BC. Pre-COSEWIC review of Interior Fraser Coho status planned March 4-5, 2013.
  - Work will not likely inform planning for 2013/14



## Interior Fraser Coho

- Moving forward what principles should Canada consider if an increase in the 3% ER for Interior Fraser coho was considered.
- Currently under the PST Canada is allowed 10% ER on IFC and is managing to 3% ER.
- Currently the 3% ER is used to account for incidental mortality of Interior Fraser coho during fisheries on other salmon species/stocks.
- The Department is seeking feedback on what considerations should be used to guide an adjustment to the 3% exploitation rate on Interior Fraser Coho in Canada.



Thank You