

# Fraser River Salmon Joint Technical Working Group Update

Forum on Harvest and Conservation Planning  
April 4, 2017



Fraser River  
Aboriginal Fisheries  
Secretariat

Canada



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

# Presentation Outline

- Recap of April 3<sup>rd</sup> JTWG In-person Meeting
- Key Technical Materials and Messages
- Next Steps



## Recap of Meeting

- New FN Co-Chair and member of FRAFS Team: Aidan Neill
- 19 Participants: 15 FN and 4 DFO
- Meeting Objective: *To discuss relevant technical information related to the April 4-7 Forum meeting and draft IFMP.*
- Full agenda however no Forum Presentations to review. The focus of our discussions was technical information related to the Forum Questions document



# Key Technical Materials and Messages

## **Sharepoint Site**

- Site is nearly set up. The key function of the site is to gain the ability to share and download current and historical files to review or work on (downloadable and read only)

## **Fraser River Chinook**

### **Coded Wire Tag Mortality Update**

- 2016 is currently not available.
- A detailed breakout of the 2015 results were provided to the group.
- Some concern raised regarding the 2015 fisheries.....no 3 year olds. Could be a signal that survival of the returning 4 year olds in 2016 would have been low (variable survival)
- The 2016 results will be distributed to the JTWG when available



# Key Technical Materials and Messages

## Fraser River Chinook

### **Marine Area Recreational Monitoring Request and 2016 Catch Estimates**

- Question raised in past Forums: what rec fisheries are monitored and what methods are used (creel, IREC, logbook)
- A historical snapshot has been provided of what areas and times have been monitored however a detailed methods description is still under review
- The JTWG thinks the information provided is useful but will likely have some follow up questions or suggestions
- In the IREC CSAS paper the understanding was that IREC would supplement existing creel surveys and generally not replace them. Recommended work on the CSAS paper has been completed since the initial review. Once the methods document is completed the approach could be confirmed.
- For 2016, stock assessment is using IREC to 'in-fill' areas that do not have creel estimate of recreational catch, no description of methods yet.

### **Chinook 5 Year Review**

- FRAFS staff have been engaged and a small group of technical participants have met two times to discuss process.
- Currently calls scheduled every two weeks with FRAFS staff and DFO leads, to keep informed.
- The general approach to the review includes a technical review followed by a discussion of mngt considerations
- A final TOR has not yet been released however a recent version has been discussed.



# Key Technical Materials and Messages

## Fraser River Chinook

### **SFAB Spring and Summer 52 Chinook IFMP Proposal**

- Brief JTWG discussion regarding the proposal
- The SFAB is looking for a consistent regime with stable and predictable opportunities
- Since 2012 there have been some additional recreational fishing areas included in the zone 1 mngt approach
- JTWG: If there is new information/new data or analysis the JTWG would like to see it
- JTWG: After reviewing trends in returns relative to brood year and the outlook some participants have expressed concerns with the approach suggested by the SFAB

### **Chinook Recruits/Spawner Index Request**

- Forum request: review trends in returns (recruits) per spawner for Spring Chinook
- Spring 42s: R/S index has improved since 2008, been variable and returned to low in 2016
- Spring and Summer 52s: R/S index has been more stable than 42s, 2016 was also low
- Important to note that the results are not a detailed R/S analysis and there are assumptions made (ie single age at return and marine harvest rates)



# Key Technical Materials and Messages

Spring 42

Year	Projected Prefishery Abundance	Marine Harvest	Terminal Return to Mouth of Fraser	Freshwater Harvest	Escapement	R/S Index
2008	20,113	2,011	18,102	5,905	12,197	0.96
2009	4,812	481	4,331	1,818	2,513	0.51
2010	14,552	1,455	13,097	3,207	9,890	1.43
2011	8,883	888	7,995	2,565	5,430	3.34
2012	17,106	1,711	15,395	3,746	11,649	1.40
2013	9,419	942	8,477	1,130	7,347	3.75
2014	34,739	3,474	31,265	6,300	24,965	3.51
2015	15,541	1,554	13,987	2,471	11,516	2.86
2016	12,138	1,214	10,924	1,988	8,936	1.04
2017 <sup>a</sup>	7,655	766	<b>6,890</b>	1,171	5,236	1.04
2017 <sup>b</sup>	20,507	2,051	<b>18,456</b>	3,138	14,027	2.79
2017 <sup>c</sup>	27,537	2,754	<b>24,783</b>	4,213	18,835	3.75

Shaded Cells: Marine harvest rate of 10%, Freshwater harvest rate of 17% (recent average)

Projected Terminal Return: <sup>a</sup> Assumed lowest R/S projected over last four years, <sup>b</sup> Assumed average R/S projected over last four years,

<sup>c</sup> Assumed highest R/S projected over last four years

Updated Fraser River Run Reconstruction Mar 17.



# Key Technical Materials and Messages

Spring and Summer 52

Year	Projected Prefishery Abundance	Marine Harvest	Terminal Return to Mouth of Fraser	Freshwater Harvest	Escapement	Implied R/S
2008	68,894	13,090	55,804	12,290	43,514	0.60
2009	98,705	18,754	79,951	19,657	60,294	1.21
2010	69,927	13,286	56,641	9,054	47,587	1.34
2011	64,320	12,221	52,099	14,187	37,912	1.18
2012	46,442	8,824	37,618	10,595	27,023	1.62
2013	52,163	9,911	42,252	4,301	37,951	1.20
2014	107,937	20,508	87,429	13,482	73,947	1.79
2015	92,960	17,662	75,298	7,351	67,947	1.95
2016	41,420	7,870	33,550	4,417	29,133	1.09
2017 <sup>a</sup>	29,523	5,609	<b>23,914</b>	3,587	18,892	1.09
2017 <sup>b</sup>	41,395	7,865	<b>33,530</b>	5,029	26,488	1.53
2017 <sup>c</sup>	52,789	10,030	<b>42,759</b>	6,414	33,780	1.95

Shaded Cells: Marine harvest rate of 19%, Freshwater harvest rate of 15% (recent average)

Projected Terminal Return: <sup>a</sup> Assumed lowest R/S projected over last five years, <sup>b</sup> Assumed average R/S projected over last five years,

<sup>c</sup> Assumed highest R/S projected over last five years

Updated Fraser River Run Reconstruction Mar 17





# Key Technical Materials and Messages

## Fraser River Chinook

### **JdeF Rec DNA Update**

- No new information provided since the last meeting (received an inventory)
- 2016 now included in the JdeF analysis
- SC staff has indicated that efforts are being made to increase sampling effort in this fishery
- Expect more discussion at a later teleconference meeting

## Fraser River Chum

### **DFO Steelhead Exposure Model**

- Forum question regarding Steelhead approach for 2017
- Draft IFMP objective similar to prior years.....
- Discussed the DFO Steelhead Exposure Model and how the IFMP objective can be assessed against fishery plans (reminder)
- Discussed the limitations of the exposure model as a planning tool.
- Described and discussed the assumptions of the model



# Key Technical Materials and Messages

## Fraser River Coho

### **2017 IFR Coho Forecast**

- Discussed the 2017 forecast for IFR Coho
- Although survival indicators observed in 2016 were higher than recent years marine survivals are still in the range of observations since the mid 1990s
- The 2017 IFR forecast is 31,212 (range 19309-50453) (3 Year Ave Model)
- The 2016 exploitation rate estimate/projection is not yet available
- Next steps to get the forecast document and understand the 2016 exploitation rate projections

### **Lower Fraser River Coho**

- Some concern raised regarding the lack of funding/commitment to support LFA Coho
- SEF proposal submitted by LFFA staff

### **2017 IFR Coho Exploitation Rate Projections**

- The pre-season plan will not be available until June/July
- The JTWG briefly discussed the 2013 pre-season plan
- The main question that came from some participants of the JTWG is what is the process for further discussions regarding the 2017 pre-season fishing plans and IFR coho impacts



# Key Technical Materials and Messages

## Fraser River Sockeye and Pink

### **1% Sockeye Mortality Calcs. in Pink Directed ITQ fisheries**

- In 2013 a 1% mortality rule was implemented to reduce impacts on sockeye
- Lots of background information in the IFMP the Department seeking feedback
- Reviewed calculations and possible scenarios to initiate discussion about IFMP planning for 2017

### **FSC Sharing Calcs. and Discussion**

- Discussed briefly the early stuart and general sockeye sharing calculations
- Discussed aggregate mngt and terminal harvest opportunities
- Under current mngt regime, terminal harvest is detrimental

### **Alternative TAM Rule Options and Outputs**

- JTWG discussed TAM rule and escapement options
- Some discussion about protecting some of the earlier timed early summers (bowron)
- Discussed alternative approaches

### **CSAS Review: WSP Status Re-Assessment for Fraser Sockeye**

- DFO plan to review at CSAS in early June
- The review includes a status re-assessment as well as methods to apply to cyclic stocks
- Formal ask for participation by a small group of JTWG to participate in the CSAS review



## Next Steps

- Finalize the set up of the sharepoint site so data or information released at a later period can be shared and accessed by the JTWG
- Consider a future teleconference meeting in June to discuss any relevant technical information that is still to be released. Some potential items:
  - 2016 Coded Wire Tag Mortality Distribution
  - Marine Area Recreational Monitoring Summary and Method Paper
  - Chinook 5 Year Review TOR and Update
  - JdeF DNA Results
  - 2016 Coho Exploitation Rate Projections/Estimates
  - 2017 Pre-season Fishing Plans (IFR pre-season impacts) (process yet to be determined)
  - CSAS Review Participation Names provided

