

# Watershed Talk

## — A weekly Aboriginal fisheries newsletter for — fisheries representatives and their organizations

# FRASER WATERSHED JOINT TECHNICAL COMMITTEE UPDATE

## Fraser Chinook: Part 2

**By Pete Nicklin, Fraser Fisheries Biologist**

The following article is Part 2 of the February 6th Watershed Talk. Fraser Chinook Part 1 and archived Watershed Talk Newsletters are available from the FRAFS website at [www.frafs.ca](http://www.frafs.ca). Also note that the FWJTC section of the website has been updated to include the December and January FWJTC meetings.

The second major discussion piece at the FWJTC meeting was a presentation of recent analytical work completed by the Okanagan Nation Alliance (ONA) and the Upper Fraser Fisheries Conservation Alliance (UFFCA). This research focused on describing objectives for improving the marine portion of assessment for early-timed and spring Chinook using genetic stock identification sampling and the use of a surrogate, or proxy, Coded Wire Tag indicator to represent stocks of concern. The use of a proxy indicator was discussed in 2008, and DFO has also explored the implementation of a proxy to represent the early timed Chinook.

The general objectives of the ONA/UFFCA analysis were as follows:

- To outline the conservation concern for stream type Chinook (early timed and spring/early summer)
- To explore ways to improve the management information for stocks of concern
- To explore ways to improve FSC chinook catches while meeting conservation needs
  - To complete a technical memo to be used as information for management recommendations for 2009 and beyond, and;
  - To promote collaboration amongst First Nations technical people and DFO.

This technical work also strives to improve current information available for decision makers, and outline concerns for implementing management

measures that may compromise current technical information (for example: present and future management must not negatively impact the CWT program).

The analysis reviewed Coded Wire Tag (CWT) data, DFO documents/reports, Chinook Technical Committee work, and examined Genetic Stock Identification (GSI) work. The ONA Chinook analyst looked at the potential for using a surrogate stock to represent Fraser stocks using Generalized Linear Model (GLIM) techniques, and completed a CWT distribution analysis.

A very brief summary of the results shows that Nicola would be a good indicator to use for Early timed and Spring Chinook for presence and time-area stratification, and there were no clear run timing differences between the Early timed and Spring Chinook. Nooksack was tested as an indicator, but did not perform very well as an indicator of exploitation rates, but may be suitable as an indicator of marine distribution for the Fraser Early-timed and Spring Chinook. Nicola CWT recoveries show in North WCVI, Georgia Strait recreational, and Juan de Fuca recreational fisheries. CWT analysis shows approximately 25% CWT recovery in ocean fisheries, primarily during return-to-spawn ages (age 4 and 5). Therefore in order to provide better protection for Nicola and the stocks that it could be a surrogate for, the Early timed Chinook measures should be expanded further north - and also further into the Georgia Strait recreational fishery – than what was done in 2008.

approach, specifically with regard to reviewing the baseline GSI stocks for comparison to Conservation Units.

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Due to the lack of a CWT indicator for Upper Fraser springs (Dome Creek is now offline), GSI method “caps” could be used to guide management measures in the Northern Troll and WCVI. In order to make this a practical approach, Upper Fraser, Middle Fraser Springs and North Thompson chinook would likely have to be aggregated in order to comprise 10% of the catch. More work has to be completed on this on this approach, specifically with regard to reviewing the baseline GSI stocks for comparison to Conservation Units.

In addition to the Early timed and Spring Chinook protective management concerns identified in the analysis, key issues identified in the analysis are recommendations for improved information related to Chinook management. Examples of improved information strategies include increased monitoring of recreational fisheries, increased DNA sampling in Chinook fisheries, increased coded wire tagging on Nicola stock, identify and implement a replacement indicator for Dome Creek (Upper

Fraser spring), conducting a similar surrogate analysis for Nicola and Coldwater/Spius to confirm the suitability of representation by Nicola, working collaboratively with DFO to ensure that First Nations technical personnel and DFO are working from a common dataset, and finally, to look at the CWT implementation recommendations from the Chinook Technical Committee and work towards implementing those recommendations.

The ONA and the UFFCA are completing a technical memo to be distributed to DFO and First Nations, based on above analysis within the next two weeks. A suite of Chinook management expectations and recommendations will accompany the technical memo, and be distributed through FRAFS.

*As an update of information the FWJTC is awaiting: DFO's 2008 Early-Timed Chinook document has not been received by the FWJTC co-chairs at the time of completion of this article.*

## UPCOMING FISHERIES MEETINGS

Monday, March 9, 2009

### Fraser Watershed Joint Technical Committee

Best Western Richmond Inn and Convention Centre

**GUEST ROOMS GUARANTEED AT THE BEST  
WESTERN UNTIL FEBRUARY 23.**

March 9 (pm), 10 & 11, 2009

### Forum on Conservation and Harvest Planning for Fraser Salmon (Nanaimo - location TBA)

March 9 & 10: First Nations only

March 11: First Nations and DFO

Please RSVP to Aimee if you will be attending these meetings: [aimee@nicolatribal.org](mailto:aimee@nicolatribal.org)

Visit [www.frafs.ca](http://www.frafs.ca) for more information.

February 25 & February 26, 2009

### BC First Nations Fisheries Council Assembly

Vancouver Island Conference Centre

Nanaimo, BC

This assembly is being held in conjunction with the BCAFN Chiefs Assembly Feb 23-25. A draft agenda, registration form and other meeting materials have been posted to the BC First Nations Fisheries Council website, as well as BCAFN Assembly materials. Day 1 will be a technical session, day 2 will be a strategic session to discuss the future mandate, structure and function of the FNFC.

Visit [www.fnfisheriescouncil.ca](http://www.fnfisheriescouncil.ca) for registration and more information.



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