# **Backgrounder: Cohen Commission's Science Research Program**

October 25, 2010

## Scientific research projects

The Cohen Commission has contracted with qualified independent experts to study a wide range of technical and scientific issues that may be associated with the decline of Fraser River sockeye salmon. Twelve research projects comprise the commission's scientific program:

- 1. Diseases and Parasites
- 2. Water pollution
- 3. Freshwater ecology and impacts
- 4. Marine ecology
- 5. Salmon farms
- 6. Data synthesis and cumulative effects analysis
- 7. Fisheries harvesting and management
- 8. Effects of predators
- 9. Effects of climate change
- 10. Production dynamics
- 11. Status of DFO sockeye science and management
- 12. Habitat analysis in the Lower Fraser River and the Strait of Georgia

Details of these projects can be found at http://cohencommission.ca/en/ScientificReports.php.

#### Selection and role of researchers

The researchers were chosen for their recognized expertise relevant to Fraser River sockeye salmon populations and ecosystems as well as their professional reputation and practical experience. The role of the researchers is to objectively assemble and integrate existing scientific knowledge in a format that can be shared with participants and the public. Preliminary analysis will form the initial platform for critical assessment and dialogue. Next, the researchers will propose hypotheses within their field of research as to potential causes for the decline of Fraser River sockeye salmon.

In most cases, the researchers will provide the commission with a progress report by November 15, 2010 and a final report by January 31, 2011. These reports will be peer-reviewed with researchers and external reviewers providing critical analysis. The final reports will be made public. The researchers will summarize their findings and conclusions during the commission's public evidentiary hearings, at which counsel for participants will have an opportunity to question the researchers and test their theories.

The commission is satisfied that its processes, grounded in the rigours of the scientific method, peer review, transparency, scrutiny and critique, will provide the Commissioner with accurate and reliable information respecting the possible causes for the decline of Fraser River sockeye salmon.

#### Peer reviewers

Each research report will be reviewed by three peer reviewers, who assist the contractors with their reports by providing a challenge function and independently assessing whether the methodology, analysis and conclusions are logical and supported by references and data. The peer reviewers will identify alternative hypotheses if appropriate.

Peer reviewers will be selected based on their education, publications, expertise and availability. The commission also aims to select reviewers who will bring a broad range of backgrounds, expertise and perspectives to the peer review process.

For each project, a peer reviewer will provide a written summary of comments, which will be shared with participants and the public after it is provided to the commission. The reviews will be tabled as evidence in the hearings as an appendix to the report to which it pertains.

### Other science-related witnesses

Counsel for participants can recommend that the commission call as witnesses other experts who may canvass additional observations or perspectives that ought to be considered, challenge any assumptions or interpretations made by contractors, or present an alternative hypothesis based on a different viewpoint or understanding of the issues, observations and experiments applicable to the field.