

# **Bristol Bay Science And Research Institute**

January 19, 2015

Jeff Regnart
Director, Commercial Fisheries Division and OEG Study Advisory Panelist
Alaska Department of Fish and Game
Anchorage, Alaska

Fritz Johnson Alaska Board of Fisheries Representative and OEG Study Advisory Panelist Dillingham, Alaska

Karl Johnstone Chairman, Alaska Board of Fisheries

RE: Update on the OEG study for Bristol Bay

Dear Messrs Regnart, Johnson, and Johnstone,

The purpose of this letter is to provide an update to you and those on the Alaska Board of Fisheries on the progress of our study to examine alternative escapement goals for Bristol Bay sockeye salmon. The OEG study was a product of an agreement by the Alaska Department of Fish and Game at the Board of Fisheries meeting in December 2012 to defer implementing proposed escapement goals to: "... give industry time to meet, discuss, and analyze economic information that would assist the Board in developing OEGs."

I am pleased to report that the project is nearly complete. A draft final report will be provided to the study's Advisory Panel (AP; Appendix A) by or before February 25, 2015. The final AP meeting is scheduled for March 4, 2015 in Seattle. **The final report will be provided to the Board of Fisheries by or before March 6, almost two weeks prior to their March 17-20 meeting in Anchorage.** The study team (Appendix A) and the study has benefited from active participation by fishermen, processors, and ADF&G over what will be 5 Advisory Panel meetings in the 12 months (Appendix C).

The study was comprised of four components and the results will be written up in two standalone reports. The first component of the study represents a closer look at the BEG analysis done by ADF&G in the fall of 2012; the report is complete and has been reviewed by ADF&G. The latter three components are part of a simulation modeling exercise to predict expected economic performance of BEGs, SEGs and OEGs in Bristol Bay. The simulation model uses day-to-day returns of salmon and the behavior of managers, the fishing industry and salmon markets to characterize the expected economic yield under alternative escapement goals across individual salmon stocks and fishing districts in the Bay.

Progress by project component is a follows:

- Technical analysis of the BEGs done by ADF&G in their 2012 escapement goal analysis. This task is complete, a report has been prepared and the report has been reviewed by ADF&G.
- 2) Biological model. This model was used to characterize the impacts on future production by varying escapement goals among rivers. This model is complete and functional, and a description of the model has been done as part of the final report.
- 3) Management Model. This model is used to mimic managers and fishing behavior on a day-to-day basis as different escapement goal scenarios are modeled 100 years into the future. The purpose of this model is to determine how many fish might be captured day to day and year to year under different escapement goal policies. All past analyses, including ADF&G's BEG analysis assume all fish in excess of the escapement goals will be captured. This model is fully functional and is being used with the three other components to estimate the economic performance of different escapement goals, including BEGs, SEGs, and OEGs. The write up of the management model is in draft form.
- 4) Economic Model. This model is used to predict the economic value of harvest under different escapement scenarios by characterizing the product mix and market prices of different products as the salmon catch varies from day to day and year to year. The management and biological models provide daily and annual catch data and this component characterizes the *value* of that catch. We then compare the value across escapement goal policies. The economic model has been build and run with earlier versions of the biological and management models. This week all final simulations will be run with our best versions of the biological and management models. The methods and some of the results from the economic modeling have been written and reviewed. We will compile all final results in the following two weeks.

We are in good shape to have a project report ready for the AP's final review in early March and the final report for the Board of Fisheries by March 6, 2015. I believe with the project's final report complete we will be in an excellent position to address Bristol Bay sockeye salmon escapement goals at the Board of Fisheries meeting March 17-20 in Anchorage.

Sincerely,

Michael R. Link

OEG Project Manager and Chief Scientist, BBSRI

cc. Keggie Tubbs, BBSRI Executive Director

### Appendix A: Membership of the Advisory Panel to the Bristol Bay OEG Study

Jeff Regnart, Director Commercial Fisheries Division, ADF&G Anchorage, AK

Fritz Johnson, Regional Fisheries Coordinator, BBEDC, and Member of Alaska Board of Fisheries Dillingham, AK

Michael Link, Project Manager for the Bristol Bay OEG Study LGL Alaska Research Associates, Inc. and BBSRI Anchorage, AK

Matt Luck, Bristol Bay driftnet fisherman, RSDA F/V Meg J Ketchum, ID

Abe Williams, Bristol Bay driftnet fisherman Fisherman, F/V Crimson Fury Naknek, AK

Vince Webster, Setnet fisherman King Salmon, AK

Bill Munroe, Bristol Bay Manager North Pacific Seafoods, Inc. Seattle, WA

John Heins, General Manager, Naknek Plant Trident Seafoods Corporation Seattle, WA

John Boggs President Deep Sea Fisheries, Inc. Everett, WA

Dr. Matt Reimer, Economist Institute of Social Science Research University of Alaska Anchorage

#### Appendix B: Study Team, Bristol Bay OEG Study

Analysis of BEGs and the biological and management models used for the economic analysis

Dr. Ray Hilborn, Professor, Fisheries Scientist University of Washington, Seattle, WA

Curry Cunningham, Ph.D. Student University of Washington, Seattle, WA

Michael Link LGL Alaska Research Associates, Inc. Anchorage, AK

#### Economic analysis

Dr. Chris Anderson, Professor and Economist University of Washington, Seattle, WA

Jocelyn Yun-Ling Wang Ph.D. Student, Economics University of Washington, Seattle, WA

## Appendix C: Meeting dates and locations for the Advisory Panel of the Bristol Bay OEG Study, 2014-15

March 5, 2014, Millennium Hotel, Anchorage, AK March 24, 2014, North Pacific Seafoods, Seattle, WA June 9, 2014, Southwest Alaska Vocational School, King Salmon, AK September 25, North Pacific Seafoods, Seattle, WA March 4, 2015 (proposed), Seattle, WA