

WASSIP: Helping Unravel Effects of Fisheries on Western AK Salmon Stocks

By Jill Klein, Executive Director

WASSIP is the Western Alaska Salmon Stock Identification Program, which was established to develop sockeye and chum salmon genetic stock identification baselines, sample salmon fisheries in western Alaska, and analyze fishery samples against the baselines to determine stock of origin of sockeye and chum salmon harvests to the finest resolution possible.

The effects of fisheries on the various stocks of sockeye and chum salmon in western Alaska have been of concern for several decades. While there are differing views on policy questions pertaining to the conservation and harvest of western Alaska salmon, there is a strong commitment by interested parties to obtain the data and scientific analyses necessary to inform the public policy debate. In turn, this will help Alaskans generate solutions to reduce conflict and assure the sustainability of the stocks and the fisheries.

In lay terms, this process is gathering information on salmon stocks to help in the management of fisheries that impact Western Alaska sockeye salmon returning to Bristol Bay and Western Alaska chum salmon returning to the Kuskokwim River, Yukon River, and Norton Sound. These fish travel through the Aleutian Chain, also known as Area M, and have been caught there, causing concern for Western Alaskans relying on these fish to return to their natal streams for harvest and reproduction.

YRDLFA, other parties in Western Alaska and the Aleutians, and the Alaska Department of Fish and Game have been working together on this effort since 2006. There is an advisory panel that meets two times a year, in addition to a technical committee that works on issues around the sampling, baseline development, and genetic stock identification. The advisory panel and a technical committee member met on April 23, 2010, in Anchorage and discussed the upcoming deadlines for completion of the sockeye baseline (which will be in June 2010) and the chum baseline (which will be completed in September 2010 with analysis beginning in October 2010).

There has been a large sampling program in place the past four years to develop the baselines. Once the baselines are finalized, the genetic analysis will begin. An effort is currently underway to determine the best course of analysis on the chum samples because chum salmon are less genetically differentiated from each other than sockeye salmon. Another key component is making sure the sampling process is adequate and enough samples are taken from all of the streams to ensure that the statistical analysis will be able to resolve which stream each salmon is from.

A series of technical papers is being developed to ensure formal documentation of this process. Additionally, a website will be created with educational topics on genetic stock identification of salmon and the WASSIP process. These should come out this summer or fall.

The WASSIP process should release final analysis and reports on the salmon stock identification program by the next round of Board of Fisheries meetings for the Arctic-Yukon-Kuskokwim and Area M regions in 2013 with hopes that this scientific information will be useful in management decision-making.