

State of Alaska  
Coastal Impact Assistance Program

**APPENDIX B-1.4**

Direct to State Funding:  
Western Alaska Salmon Coalition Project

**Tier 1 Project**

**STATE OF ALASKA****COASTAL IMPACT ASSISTANCE PROGRAM****Alaska Department of Fish and Game, Commercial Fisheries Division****PROJECT TITLE: Western Alaska Salmon Coalition (WASC) Chum and Genetic Identification Program**

Note: This project was approved as part of the March 2010 Amendment to the Alaska CIAP Plan with a budget totaling \$1,379,750. It will be modified through the grant process to reflect the numbers below. The reduction is due to the reduction in Federal CIAP allocation to the State of Alaska for FY 2010.

**PROJECT CONTACT**

This proposal is being submitted by ADF&G on behalf of WASC. ADF&G biologists and scientists have no role in development of this proposal.

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**PROJECT LOCATION**

The proposed project takes place in the Western Alaska coastal zone, specifically the significant commercial and subsistence salmon fisheries in marine areas from the Chignik Fishing District north through Bristol Bay and the Yukon-Kuskokwim region to and including Norton Sound and the Bering Strait region. (See Attached Maps 1-4)

**PROJECT DURATION**

The project is expected to take three years.

**ESTIMATED COST**

Spending Estimate (\$)				
TOTAL	Year 1	Year 2	Year 3	Year 4
\$1,373,070.31	\$800,000	\$400,000	\$173,070.31	

Funding per Allocation Year of CIAP (\$)				
TOTAL	FY 07	FY 08	FY 09	FY 10

\$1,373,070.31	0	0	\$1373070.31	0
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## PROJECT DESCRIPTION

The Western Alaska Salmon Coalition (WASC) is an association of four regional Alaska Native non-profit organizations: the Bristol Bay Native Association (BBNA), the Association of Village Council Presidents (AVCP), the Tanana Chiefs Conference (TCC), and Kawerak, Inc. Collectively the WASC represents 149 villages in Western and Interior Alaska.

The purpose of this project is to conduct genetic stock studies of salmon, principally chum and sockeye salmon, to describe the genetic diversity of spawning salmon in Western Alaska in terms of geographic and temporal variability. The particular salmon stocks to be studied will be determined after consultation with the Alaska Department of Fish & Game (ADF&G) and other fishery managers and researchers to determine gaps in existing data. The information derived from this project will assist fisheries managers more accurately apply genetic stock identifiers to determine the catch and by-catch contribution of salmon by place of origin in the various Western Alaska and Bering Sea fisheries, and to allow improved estimation of productivity and fishery impacts on a stock-specific basis. This information will assist fisheries managers to maintain sustainable harvests and healthy fish stocks. Additionally, the data will expand the baseline information necessary to measure and mitigate potential damages to western Alaska salmon stocks from industrial development, such as onshore mining and OCS oil and gas development in the North Aleutian Basin. A lease sale in the North Aleutian Basin is currently scheduled by the Minerals Management Service for 2012.

Coordination will occur with ADF&G, the U.S. Fish & Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA), and subsistence and commercial fishery stake-holders in western Alaska.

Year 1 activities will include extensive consultation with ADF&G, other researchers and WASC's scientific advisors to prioritize the use of resources, which will include the identification of gaps in the baseline data in the regions represented by WASC; the collection of genetic samples from selected salmon stocks; and contracting with a qualified genetics lab for the genetic analysis, and lab work. Year 2 activities will include continuation of the laboratory genetic analysis, and a 2<sup>nd</sup> round of sample collections. Year 3 activities will include continued genetic analysis and the publication and dissemination of the project data.

This project is needed because, for decades, the difficulty in accurately determining the place of origin of salmon has been an impediment to fisheries management in Alaska. The identification by particular stock of salmon that are intercepted in the federally managed fisheries of the Bering Sea or by state managed salmon fisheries harvesting mixed stocks is of great concern to user groups and managers alike. The disproportionate interception of chum salmon that are destined for a stream with a small and declining stock would be of much greater concern than the interception of a similar number of chums from a larger, healthier stock. But managers need to be able to identify with particularity which is which. Continuing advances in genetic science hold the promise of answering the question of where particular salmon originate.

Existing and proposed large scale mining development in Western Alaska and the proposed oil and gas lease sale in the North Aleutian Basin, which is in the migratory route of most Western Alaska salmon, make baseline data in the form of a good genetic map of salmon stocks an important tool in identifying and mitigating potential adverse impacts of development on the fish.

There is a strong commitment by all stakeholders from Chignik to Norton Sound to obtain the data and scientific analyses necessary to inform the Board of Fish, Department of Fish and Game, and the public to help Alaskans generate solutions to assure the sustainability of the stocks. The debate over effects of fisheries on the various stocks of chum, sockeye, and Chinook salmon in western Alaska has been going on for several decades and the information provided by this project is critical to helping to resolve it.

### **MEASUREABLE GOALS AND OBJECTIVE**

ASC will contract with a qualified genetics lab for analysis of chum and sockeye. Samples will be collected from at least 20 locations representing separate salmon stocks. Raw genetic data will be generated and a peer-reviewed analysis conducted. The resultant report will be made available to state and federal policy makers such as the Alaska Board of Fish and the North Pacific Fisheries Management Council, to the WASC members, commercial fishing groups and other stakeholders. This project will produce new information on the numbers and distribution in space and time of the various stocks of Western Alaska salmon to allow improved estimation of productivity and fishery impacts on a stock-specific basis.

### **PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE**

This project is within Authorized Use 1, *Projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands*. This project will provide baseline genetic data to protect diversity in Western Alaskan salmon stocks. This data will enable managers to identify at risk stocks and make more informed management choices in regard to offshore and onshore development, and in the conduct of fisheries that intercept salmon away from their natal streams. This project fits into the State's efforts to manage the fisheries scientifically from the best available data.

### **COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS**

This is a new project. WASC members have a history of coordinating with the federal land management agencies in Western Alaska and with NOAA and the North Pacific Fisheries Management Council. This project will coordinate with the USFWS and with NOAA.

### **COST SHARING OR MATCHING OF FUNDS**

CIAP funds will not be used for cost sharing or matching purposes.

## MAPS

Figure 1. Map of the Chignik and Alaska Peninsula Areas

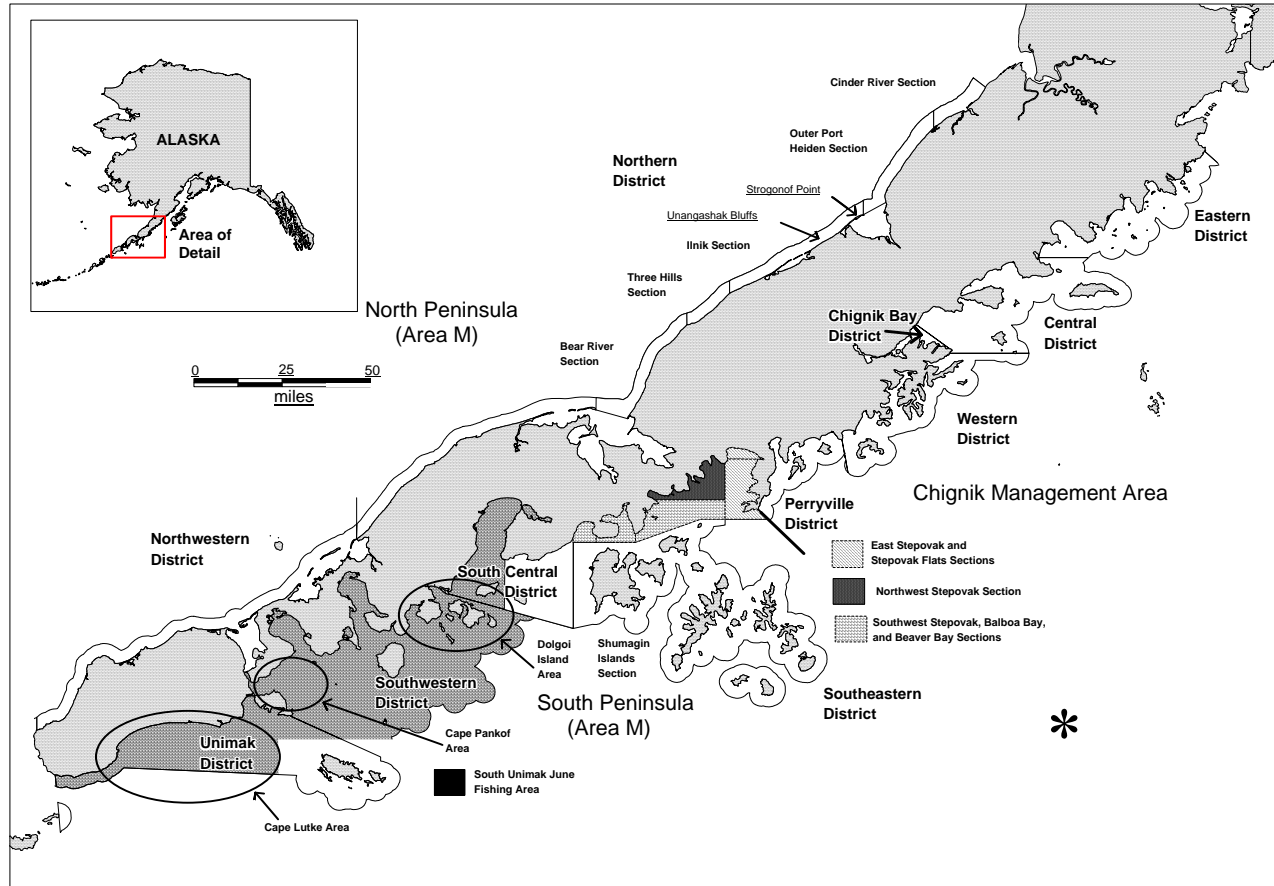


Figure 2. Map of commercial salmon fishing districts in Bristol Bay, Alaska.

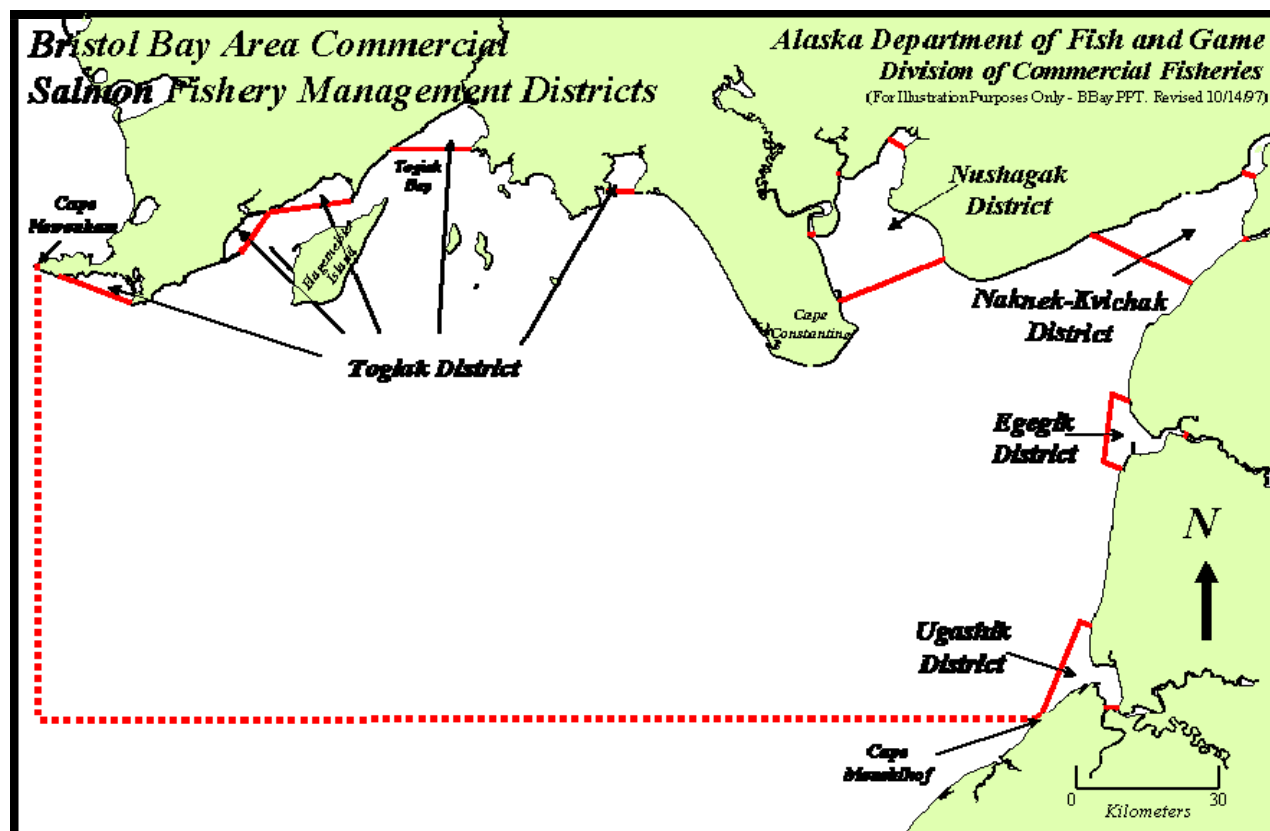


Figure 3. Location of villages along Bering Sea coast and Norton Sound where subsistence harvests occur.



Figure 4. Commercial fishing districts, subdistricts, and fishing communities of Norton Sound

