

State of Alaska
Coastal Impact Assistance Program

APPENDIX B-2

Project Descriptions
Direct to Coastal Political Subdivision Funding

Approved Projects

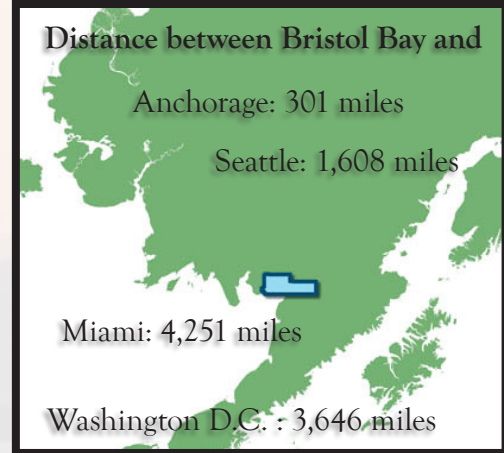
BRISTOL BAY BOROUGH	
Tier 1 Projects	
AKCIAP_CPS_BBB_T1-01	Preliminary Fish Wastes Disposal Study

BRISTOL BAY BOROUGH

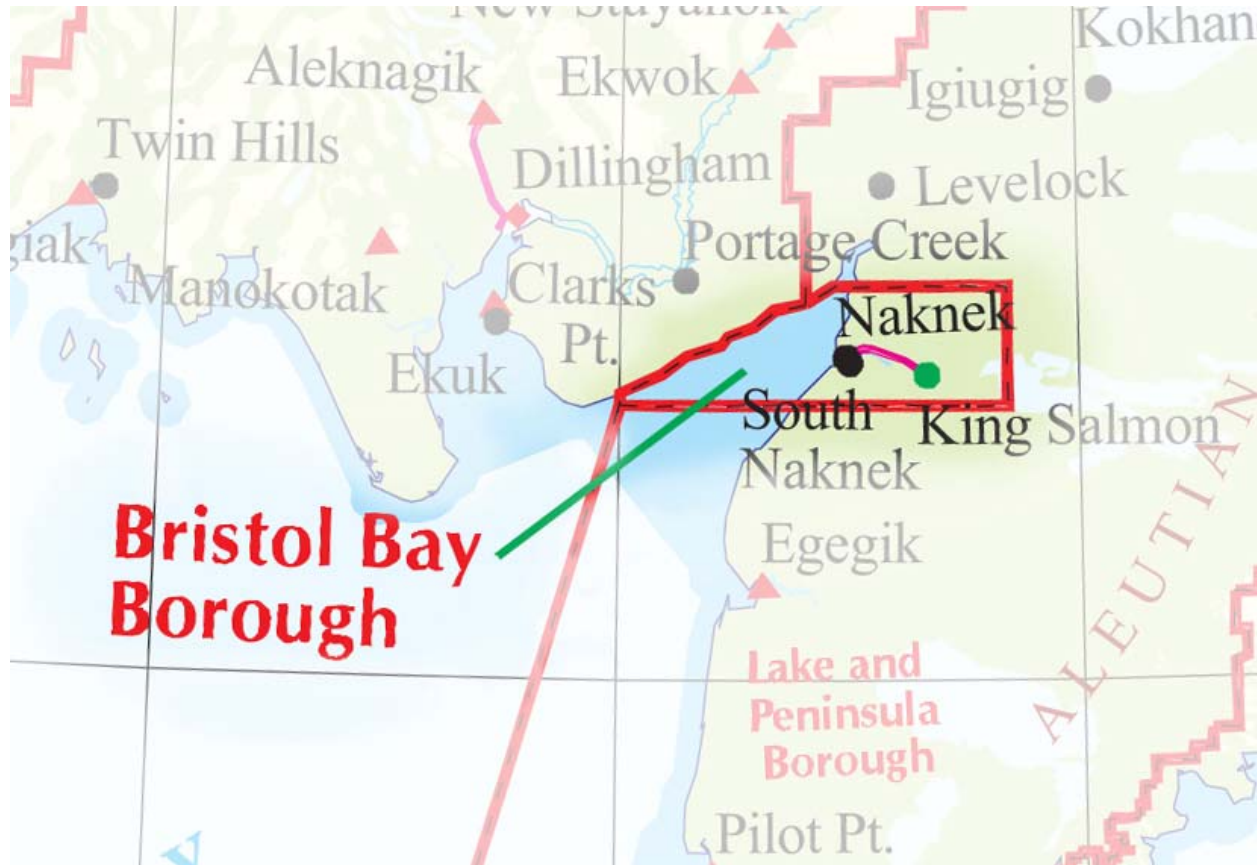


Brief History: The Bristol Bay Borough is centered around the Naknek River that flows west from King Salmon to Bristol Bay. The region was settled by Athabascan Indians, Central Yup'ik Eskimos, and Sugpiaq (Aleut-Russian) Eskimos. In the 19th century Russian settlers and Russian Orthodox missionaries entered the area. In the 20th century a military base was developed in King Salmon for WWII, and its airstrip is now used to bring jet service to the Borough. All five species of Pacific Salmon migrate to Bristol Bay from the Gulf of Alaska. Due to the outstanding commercial fishing opportunities, the Borough's population increases by several thousand during the red salmon season.

Population (2007):	1,257
Shoreline:	156 miles
Coastal Area:	855 square miles
Annual Precipitation:	20"
Annual Snowfall:	45"
Hours of Daylight Summer:	18 hours, 25 min
Hours of Daylight Winter:	6 hours, 20 min
Regional Native Corporation:	Bristol Bay Native Corp.
Legislative District:	37 S



BRISTOL BAY BOROUGH



**STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM**

Bristol Bay Borough

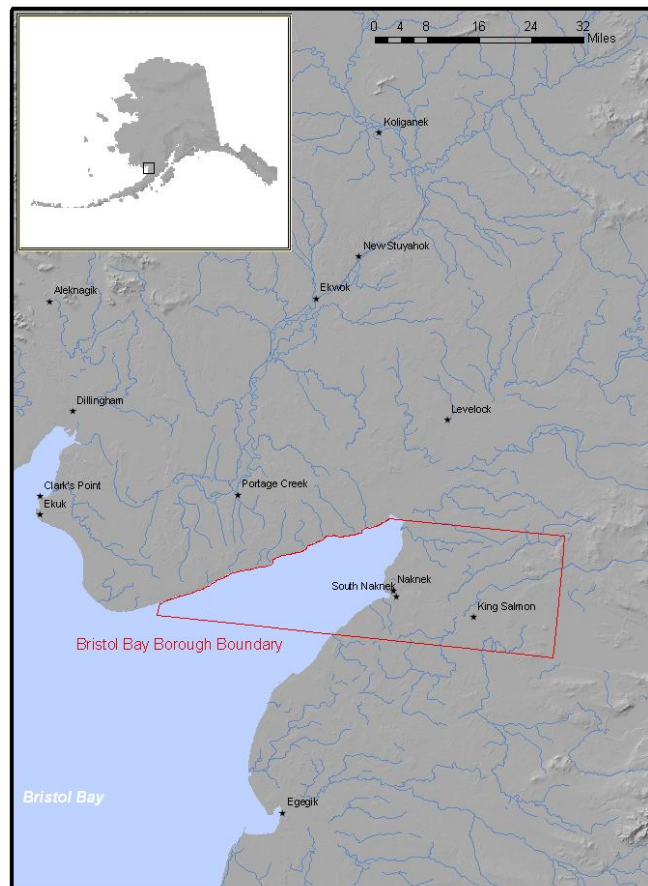
PROJECT TITLE: Preliminary Fish Wastes Disposal Study

PROJECT CONTACT

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PROJECT LOCATION

Bristol Bay Borough is one of Alaska's smallest boroughs, located on the north side of the Alaska Peninsula. It is headquarters in King Salmon, AK.



PROJECT DURATION

This preliminary alternatives investigation will be completed within one year.

ESTIMATED COST

Spending Estimate (\$)	
TOTAL	Year 1
\$21,803.81	\$21,803.81

Funding per Allocation Year of CIAP (\$)				
TOTAL	FY 07	FY 08	FY 09	FY 10
\$21,803.81	665.86	665.86	10,289.08	\$10,183.01

PROJECT DESCRIPTION

Of the approximately 250 seafood processing facilities permitted to operate in Alaska, 13 on-shore facilities are located in the Bristol Bay Borough. They process several million pounds of seafood annually, primarily salmon. Processing seafood results in the discharge of heads, skin, scales, viscera, tail fins, and shells as a solid and liquid waste effluent.

Such seafood processing facilities are subject to Section 402 of the Clean Water Act, which allows the U.S. Environmental Protection Agency to regulate such effluent under the National Pollutant Discharge Elimination System (NPDES).

Currently, on-shore and off-shore processors may obtain a general permit (NPDES Permit No. AK-G52-0000). Permits are required because seafood processing effluents need to be regulated and limited because they can negatively impact receiving coastal waters and marine environments because it tends to be very high in biological oxygen demand, chemical oxygen demand, total suspended solids, fat, oils and grease, as well as potentially pathogenic and other microflora, organic matters and nutrients, etc. Additionally, this waste can settle to the ocean floor, where after accumulating may smother the ocean floor, depleting oxygen levels. For these reasons, the Bristol Bay Borough is concerned about the existing practice of discharging the fish wastes into water. Some of the processing facilities have come close to violating their general permit. Discharging more than the permit allows could lead increased damage to the coastal environment. Additionally, they have received complaints from residents in regards to fish wastes making it into subsistence nets.

The Bristol Bay Borough proposes to investigate alternatives to current seafood waste processing and discharge methods. This preliminary alternatives study will first research current alternatives employed in Alaska and assess their applicability to both the environmental and cost restraints of operating in Bristol Bay.

For example, the following are potential projects to assess:

- Extract the oil from the waste and produce a usable product, such as Fish Oil for nutritional supplements, or Biodiesel for energy production.
- Expand the amount of waste material used to be rendered into fishmeal at meal processing facilities
- Land applications and other alternative disposal methods.

The Borough of Bristol Bay will contact many of the local processing facilities to better understand their opinions, potential drawbacks, and potential advantages surrounding changes to the way in which fish wastes are handled.

This project will bring officials at the Bristol Bay Borough, representatives of the fish processors, and professional consultants into communication in regards to the preferred mechanism to handle the waste generated at the fish processing facilities. All stakeholders will have an opportunity to contribute their opinions to this study. Officials from communities such as Cordova, and Dutch Harbor will be contacted to discuss how their fish waste minimization programs have progressed and if any local environmental changes have been recorded, and if so, how was it monitored.

The environmental and economic impacts of each alternative will be assessed in the preliminary study, and a means to monitor the environmental impacts of the alternatives will be developed. During the alternatives analysis the environmental impacts will be analyzed in much greater depth.

The goal of the preliminary alternative's investigation would be:

- Preliminarily study what has been done to mitigate impacts in other areas of Alaska from fish processing wastes
- To assess what options exist for the minimization of environmental impacts resulting from the discharge of fish waste discharges
- Preliminarily analyze the costs associated with each alternative
- Establish contacts for the much larger alternatives analysis
- Produce a document which would serve as part of the structural framework for the ensuing alternatives analysis

To date, there is no formal documentation of ideas that have been discussed in regards to handling the Bristol Bay's processing facilities waste. One of the objectives of this investigation would be to formalize what has already been discussed.

MEASUREABLE GOALS AND OBJECTIVES

The measurable outcome of this study will be in the form of a document that outlines what alternatives will be analyzed in the alternatives analysis portion of the project. This study will identify the current alternatives to current seafood waste processing and discharge methods employed in Alaska and assess their applicability to both the environmental and cost restraints of operating in Bristol Bay.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

This project falls under the authorized use #1, “projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.”

This preliminary study would serve as a scoping document and form the structural framework for which a much larger and more extensive study would be launched, an “alternatives analysis”. This study would ultimately provide a solution in which to handle the processors waste. The third phase of the project would be design, and the fourth would be implementation. The scoping document is an important piece leading to what will ultimately result in a reduced amount of fish waste and the protection of coastal areas from the negative impacts of fish waste as identified above.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

Bristol Bay has not been in contact with other federal agencies about other funding opportunities for this project.

COST SHARING OR MATCHING OF FUNDS

CIAP funds will not be used for cost sharing or matching purposes. The Bristol Bay Borough is committed to and has donated time and resources to make this study possible. As already stated, this project would provide the structural framework upon which the detailed alternatives analysis would be based upon. The analysis would berth the best option for minimizing environmental impacts resulting from the expulsion of fish processing facilities in Bristol Bay waters. The Borough of Bristol Bay sees this alternatives investigation as a necessary step in the process and will provide resources, as required, to finish the investigation.