# Community Coastal Impact Assistance Program

## Improving Waste Disposal to Protect Coastal Areas

### Award Amount
$ 156,181

### Grantee
Bering Straits Coastal Association

### Project Contact
Willa Eckenweiler, Program Director
P.O. Box 231, Unalakleet, AK 99684
Telephone Number: (907) 624-3780
E-mail Address: wteckenweiler@hotmail.com

### Location
This project will be located in the Bering Straits Coastal Association region which includes the area of the former Bering Straits Coastal Resource Service area, generally the Norton Bay and Seward Peninsula area in Northwest Alaska. All 15 communities within the coastal zone of the area serviced by the Bering Straits Coastal Association will be invited to participate in this project: Brevig Mission, Diomede, Elim, Gambell, Golovin, Koyuk, Savoonga, Shaktoolik, Shishmaref, St. Michael, Stebbins, Teller, Unalakleet, Wales, and White Mountain. The other communities that are not currently occupied or occupied on a seasonal basis may be involved in this project as appropriate: Tin City, Council, King Island, Mary's Igloo, Port Clarence, and Solomon. The project will be managed from Unalakleet located at 63.8816 North Latitude and 160.798 West Longitude.

### Project Duration
**Project Start Date:** October 1, 2013
**Project End Date:** September 30, 2016
**Project Duration:** 3 years

### Project Description
The purpose of this project is to reduce impacts to the natural coastal environment from human-generated waste. The project involves a multifaceted approach that includes an inventory of current waste management practices in the Bering Straits region, an education and outreach effort, encouragement of recycling, and several community projects that will improve waste management practices. This project will result in direct and indirect benefits to the conservation and protection of Bering Straits Coastal Association (BSCA) coastal areas by encouraging reduction of wastes, recycling, backhauling wastes to proper disposal facilities, improved handling of hazardous materials, proper treatment and disposal human wastes, and improvements to landfill and waste collection systems. Efforts to reduce, reuse and recycle waste and prevent environmental contamination will protect, conserve and restore the coastal area.

At the beginning of the project, the Alaska Department of Environmental Conservation (DEC), the Environmental Protection Agency (EPA), and Kawerak Inc., the regional Native nonprofit, will be contacted to determine how the project can complement other efforts in the BSCA without duplicating them.

The BSCA Program Manager will manage the project and complete project goals and objectives with assistance from a consultant experienced in solid waste issues in rural Alaska. The Program Director will develop a request for proposals for a qualified consultant, evaluate the proposals, and with approval of the BSCA board, select a consultant and enter into a contract.

The consultant will assist with completion of project tasks during the 3-year project. The first year involves information gathering which will be used in years 2 and 3 to provide direct and indirect environmental benefits. Without an accurate inventory, efforts to conserve, protect or restore the natural coastal environment from human-generated wastes will not be successful.

## Measurable Goals and Objectives

**Year 1**

- Complete community inventories for each of the 15 communities in the BSCA on how they handle their wastes.
- Complete a summary of information provided by organizations, agencies and major landowners in the BSCA region regarding waste management requirements and practices.
- Complete a regional assessment of waste management practices, including successful practices and cost-effective next steps communities can take.

**Year 2**

- Develop educational materials and complete presentations in at least 3 communities on waste management issues. Distribute hard copies of the presentation to other communities.
- Implement waste management actions committed to by the communities participating in the project that will reduce impacts to the coastal environment from human wastes (e.g., plastics that can become entangled with wildlife and leachates from hazardous liquids, cleaners, pesticides, and batteries).
- Implement waste management community projects in at least 3 BSCA villages.

**Year 3**

- Evaluate the 3 community waste management projects.
- Complete draft project report for review and comment with recommended strategies for improving waste handling in the BSCA region, summaries of the 3 community waste management projects and efforts by other communities to reduce impacts to coastal areas.
- Complete final project report and distribute it to all 15 BSCA communities, participating agencies and organizations, and other communities and upon request.

## CIAP Authorized Use

This project is consistent with Authorized Use #1 – Projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands. This project will lead to direct benefits to the coastal environment through the results of the 3 community projects and

commitments made by communities to implement waste management actions to decrease impacts. Such actions will include reduction of wastes, containment of waste at dump sites so materials do not spread to other coastal areas, separation of hazardous materials, backhaul of electronics and hazardous materials, and improvements to landfill and waste collection systems. Indirect benefits, such as the inventory of current waste management practices, summary of success stories, and education, will result in future direct benefits to the environment. Education is the best way to develop awareness of how individuals and communities can alter their behavior to provide benefits to the coastal environment. Development of an environmental ethic among young people will result in benefits for generations to come.

Current waste management practices in rural Alaska adversely affect the coastal environment. Many communities in rural Alaska do not adequately manage solid wastes, and some communities do not separate toxic wastes from the general waste stream. Leachate from hazardous waste adversely impacts the environment and can negatively impact fish, wildlife and humans. If not properly treated, human waste can introduce harmful coliform bacteria into the environment. Improper disposal of plastic trash adversely affects fish and wildlife and can lead to mortality. This project will assess current practices and recommend strategies to improve current waste management.

A regional approach to waste management will result in greater benefits to the natural environment than ad hoc efforts by individual communities. Because there is no regional municipal government, leadership from the BSCA for waste management issues will provide a needed service. Most of the 15 communities are connected by a road system, and the high costs of water and air transportation make it difficult to properly manage wastes. This project will include consideration of unique circumstances facing each community and identify solutions that have worked for other similar rural communities.

Most villages in the region face enormous challenges with limited capacity to manage human-generated wastes. Solid waste continues to grow as planes and barges bring in tons of cargo to every village, but few items ever leave the villages. Waste ends up in the village dump which may not be actively managed or monitored. Fencing is often inadequate, and in some cases sites may be located too close to airports. Some wastes, such as plastic bags and “six-pack rings” adversely affect wildlife because of entanglement. Smoke from open burning or spontaneous – combustion of trash produces PCBs, dioxins, and other toxins that impact the coastal environment. Emptying of “honey buckets” into the dump site from households without sewer systems poses environmental and human health risks. In most villages, trash is hauled by individuals, and there are no systems to separate recyclables or hazard materials. These waste sites are often located near waters or wetlands that provide a direct link for wide distribution of contaminants. Without proper disposal, leachates from cleaning fluids, pesticides, batteries, paint, electronics, and other wastes pose a significant environmental threat.