State of Alaska
Coastal Impact Assistance Program

APPENDIX B-2

Project Descriptions
Direct to Coastal Political Subdivision Funding

Lake and Peninsula Borough		
Tier 1		
AKCIAP_CPS-LPB-T1-02	Removal and Haul Out of Scrap Metal and Hazardous Household Wastes	746,557
AKCIAP_CPS-LPB-T1-03	Mitigation of Impacts to Fish, Wildlife, and Natural Resources Through Litter and Coastal Debris Removal	130,000
AKCIAP_CPS-LPB-T1-04	Anadromous Stream Culvert Replacement to Mitigate Impacts to Fish	100,000
AKCIAP_CPS-LPB-T1-05	The Black Lake Conservation, Protection and Restoration of Fish and Wildlife Habitat Project	100,000
AKCIAP_CPS-LPB-T1-06	Administrative Costs for the Implementation of CIAP	53,764
	Subtotal	**1,130,321**
Tier 2		
AKCIAP_CPS_LPB_T2-01	Lake and Peninsula Borough Mapping Update for the Protection of Critical Coastal Resources and Identification of Land Status	10,000
AKCIAP_CPS_LPB_T2-02	Lake and Peninsula Borough Coastal Management Plan Amendment – Community Outreach Component	22,800
AKCIAP_CPS_LPB_T2-03	Lake and Peninsula Borough Beach Erosion Tracking Program and Community Profile Map Additions and Updates	105,273
	Subtotal	**138,073**

LAKE & PENINSULA BOROUGH

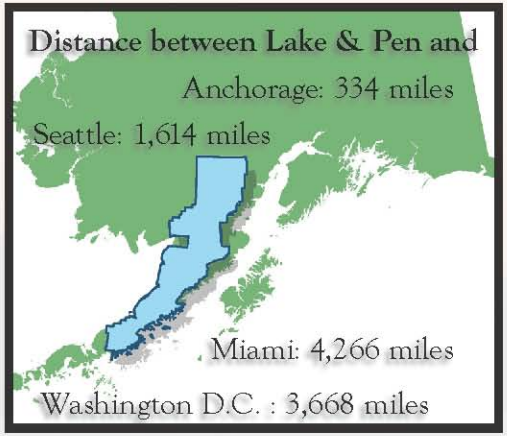
Brief History: The Borough is influenced by resources of Bristol Bay, Gulf of Alaska, and Lake Iliamna. The Yup'ik Eskimos, Aleuts, Athabascan Indians, and Iñupiat people have jointly occupied the area for the past 6,000 years. Russian explorers came to the region during the late 1700s. The late 1800s brought the first influx of non-native fishermen and cannery operations. During WWII, numerous military facilities were constructed on the Alaska Peninsula including Fort Marrow at Port Heiden. Commercial fishing and fish processing are the most significant sectors of the economy within the Borough, which contains three of the State's most important salmon fishing districts: Egegik and Ugashik on Bristol Bay and Chignik on the Pacific coast. Fishing and three national parks- Lake Clark, Katmai, and Aniakchak- bring visitors to the region. Located within the Borough, Iliamna Lake is the 2nd largest freshwater lake in the U.S.


Photo Courtesy: DCRA

Population (2007):	1,552
Shoreline:	1,824 miles
Coastal Area:	11,363 square miles
Annual Precipitation:	24"
Annual Snowfall:	50"
Hours of Daylight Summer:	18 hours, 7 min
Hours of Daylight Winter:	6 hours, 30 min
Regional Native Corporations:	Bristol Bay Native Corp. & Koniag Inc.
Legislative District:	3, 4, B


Photo Courtesy: DCRA


Photo Courtesy: DCRA



STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM

LAKE AND PENINSULA BOROUGH

PROJECT TITLE: Removal and Haul Out of Scrap Metal and Hazardous Household Wastes

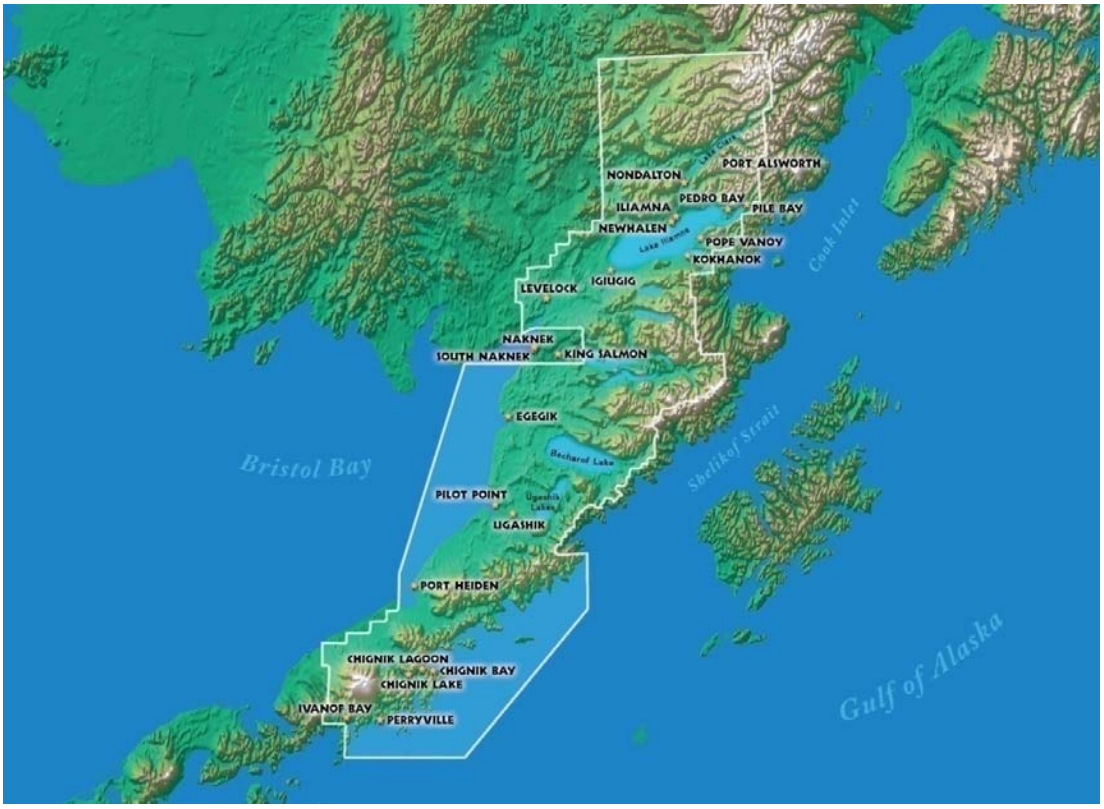
Note: This project was approved as part of the March 2010 Amendment to the Alaska CIAP Plan. This amendment increases the project budget.

PROJECT CONTACT

Contact Name: Jordan Keeler, Community Development Coordinator
Address: PO Box 495 King Salmon, Alaska 99613-0495
Telephone Number: (907) 246-3421
Fax Number: (907) 246-6602
Email Address: jordankeeler@lakeandpen.com

PROJECT LOCATION

The cities of Chignik, Port Heiden, Pilot Point, Newhalen, and Nondalton and the villages of Chignik Lake, Chignik Lagoon, Perryville, Ugashik, Levelock, Igiugig, Kokhanok, and Iliamna.



PROJECT DURATION
4 Years

ESTIMATED COST:

Spending Estimate ($)				
TOTAL	**Year 1**	**Year 2**	**Year 3**	**Year 4**
746,557.12	275,000	275,000	100,000	96,557.12

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
746,557.12	34,518	34,518	341,510	336,011.12

PROJECT DESCRIPTION:
The isolated and sparsely populated villages and cities of the Lake and Peninsula Borough are burdened with a long-term build up of junked vehicles (cars, trucks, ATVs) and the resulting scrap metal, the toxic materials associated with the vehicles, and household hazardous wastes. The majority of the cities and villages in the Borough are in this situation.

Junked vehicles and discarded appliances pose an environmental problem for the cities and villages of the Borough. Junked vehicles, aside from the obvious pollution from the rusting metals, pose a threat with the various oils, fluids, lead-acid batteries, and other toxic substances that remain when a vehicle is placed in a landfill or abandoned around town. These toxic substances have the potential to filter down to the water table or contaminate nearby steams and coastal areas. Smaller animals use the abandoned vehicles and scrap metal as a nesting site and in turn lure larger predators such as bears and wolves. Discarded household appliances such as refrigerators and microwaves contain toxic materials including refrigerants and heavy metals. These substances can easily damage local ecosystems if introduced in any amount. Coastal erosion in Port Heiden has recently begun to expose the old landfill's vehicles and auto or marine batteries posing a clear threat to the local coastal area.

If and when junked vehicles and broken household appliances are hauled to the landfill, they take up space that could be used by non-hazardous, common household wastes. Their presence in the landfill allows for continued pollution and creates the need for additional landfills, which costs the cities and villages money to create and maintain, which leads to more disturbed habitat.

There are multiple factors that have contributed to the build-up of junked vehicles and discarded appliances. Foremost, the cities and villages in the Borough are removed from the road system and are subject to high shipping costs, either by barge or by airplane. This makes removal extremely expensive because the vehicles, appliances, and associated wastes must be hauled out by barge and then either to Anchorage or Seattle for proper disposal. The small populations of the Borough's cities and villages have very basic landfills that do not have the capacity for proper disposal or temporary storage for metal and hazardous wastes, plus the high costs of proper storage and disposal are beyond the means of individual communities.

A Borough-wide haul out of scrap metal and household hazardous wastes addresses the problem of a long-term accumulation by removing the offending material and eliminating the possibility of spills, leaks, and other means of hazardous materials contaminating flora and fauna. By working with local entities such as city/village/tribal councils and IGAP programs, the Borough will develop a four-year strategy with Year 1 and Year 2 dedicated to scrap metal and junked vehicles, and the Year 3 and Year 4 will focus on hazardous household wastes.

MEASUREABLE GOALS AND OBJECTIVES:
Year 1: Collect and barge out junked vehicles and scrap metals from the cities and villages on the Pacific side and Bristol Bay side of the Alaska Peninsula.

Year 2: Collect and barge out junked vehicles and scrap metals from the cities and villages in the Lake Iliamna area. Obtain permits, if necessary, for Year 3 and 4 actions from applicable agencies.

Year 3: Remove and barge out hazardous household wastes and batteries from cities and villages on the Pacific and Bristol Bay side of the Alaska Peninsula

Year 4: remove and barge out hazard household material wastes and batteries from cities and villages in the Lake Iliamna area.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE:
This project is consistent with CIAP Authorized Use #1: Projects and activities for the conservation, protection, or restoration of coastal areas. The Borough's cities and villages lack the means for proper storage and disposal of junked vehicles, scrap metal, and hazardous household wastes. Without any feasible means or methods to handle the problem, the waste remains in the village, slowly degrading and threatening to release toxic elements into the local ecosystem. By instituting a haul-out program, the threat of contamination to the coastal areas around the village is eliminated and the coastal areas protected.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS:
The Borough expects to coordinate with multiple agencies and levels of government for a successful project. The Borough expects to work with DEC to ensure the proper collection and shipping of hazard materials, as well as a possible training seminar for community members that will be actively involved in the removal process. Coast Guard permits may be required for shipping the materials to their final destination and the Borough will contact the Coast Guard to ensure compliance. Tribal IGAP and local levels of governments will be partners in the process by providing a local perspective and working with the Borough to ensure the final plan factors in local concerns and unique conditions.

COST SHARING OR MATCHING OF FUNDS:
CIAP funds would not be used for cost sharing or as a match.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM

Lake and Peninsula Borough

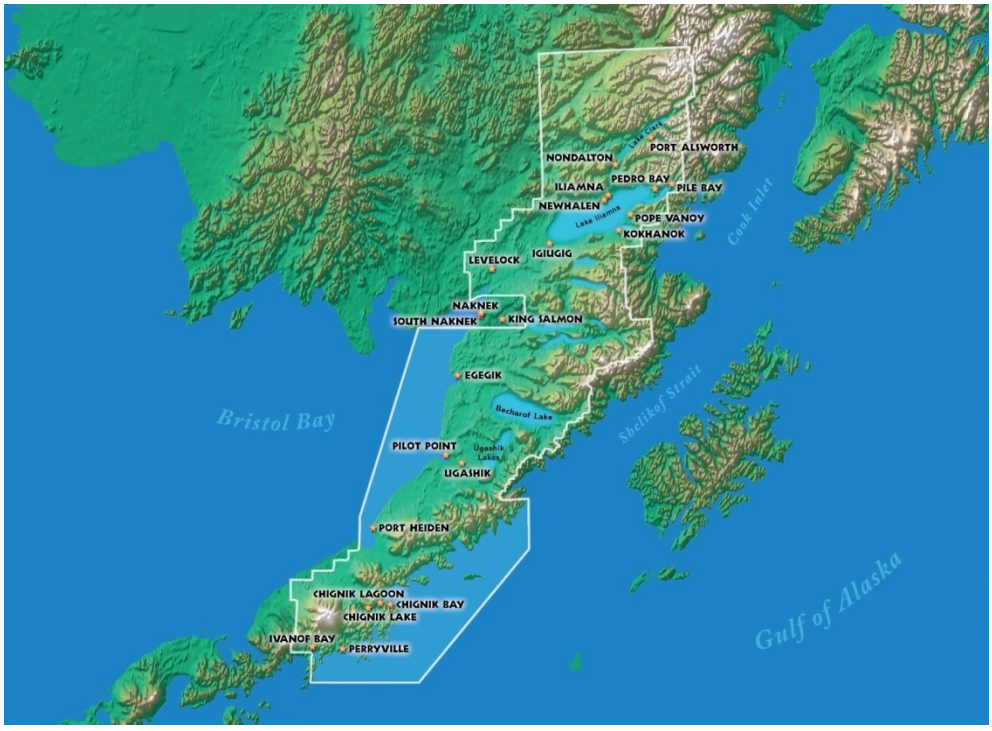
PROJECT TITLE: Mitigation of Impacts to Fish, Wildlife, and Natural Resources Through Litter and Coastal Debris Removal

PROJECT CONTACT

Contact Name: Jordan Keeler, Community Development Coordinator
Address: PO Box 495 King Salmon, AK 99613-0495
Telephone Number: (907) 246-3421
Fax Number: (907) 246-6602
Email Address: jordankeeler@lakeandpen.com

PROJECT LOCATION

This project will involve all communities in the Lake and Peninsula Borough except Pope Vannoy, Ivanoff Bay, and Pile Bay. The coastal zone encompasses the entire Borough and all communities are adjacent to major bodies of water.



PROJECT DURATION

2 Years

ESTIMATED COST

Spending Estimate ($)				
TOTAL	**Year 1**	**Year 2**	**Year 3**	**Year 4**
130,000	65,000	65,000	0	0

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
130,000	0.00	0.00	65,000	65,000

PROJECT DESCRIPTION

The Lake and Peninsula Borough will work with each community in the Borough to organize a litter and coastal debris removal effort in each community.

The communities of the Lake and Peninsula Borough are burdened with internal sources of litter and external sources of marine debris that degrade the natural environment and threaten both flora and fauna. Litter, poorly contained landfills, inefficient burn-boxes, and deteriorating structures contribute litter to the communities and the local environment. Coastal storms and river floods deposit debris ashore across the Borough, polluting and disrupting wildlife and anadromous streams.

The small communities of the Lake and Peninsula Borough have very basic landfill facilities, or no landfill in a few communities, and lack centralized trash collection. Consequently, proper disposal of waste material can be problematic. Improperly fenced landfills and burn-boxes are common source of plastics, discarded household items, and waste paper in the communities. Litter from careless individuals, while rare, invariably ends up in local waterways and along the coast. Poorly contained trash and litter are an unhealthy and unnatural invitation to mammals and birds. The severe weather in the Borough contributes to the rapid deterioration of buildings, which leads to the spread insulation, scrap metal and wood, and other construction material by natural forces as well as animals.

Marine debris is also problematic in the Borough and damages the coastline and river banks. Large coastal storms will often deposit debris, such as used nets, buoys, plastics, lines, and other maritime debris along the shoreline. Animals and fish can ingest or become ensnared in these wastes, harming or killing them. Colored plastics are especially problematic as they are mistaken for food by fish and birds alike and cause severe digestive problems. Rivers in the communities, and consequently fish and wildlife, also suffer from debris. Waters, especially in times of flood, erode riverbanks, causing structures near the banks to fall in the river. These structures quickly break up and get deposited on the banks of the rivers, impeding the natural flow of waters and fouling the shoreline areas.

A litter and coastal debris impact will greatly benefit the entire ecosystem. Removing litter and debris from coastal areas prevents opportunities for animals and fish to become trapped in *de facto* gill-nets and snares. This clean-up of coastal areas will also prevent the ingestion of plastic and other wastes by animals at all levels of the food chain, eliminating the problem of accumulated bio-toxicity, especially in higher-level predators.

MEASUREABLE GOALS AND OBJECTIVES

- Coordinate with city/village/tribal entities to determine highest priority area in each community
- Collect and properly dispose of litter and marine debris in 8 of the Borough communities in year one
- Collect and properly dispose of litter and marine debris in the 8 remaining Borough communities in year two
- Recycle, if possible, plastic and metal litter and marine debris
- Catalogue nature and amount of litter and debris
- Involve communities and create awareness of problem
- Use one-time CIAP funds for the initiation of yearly clean-up efforts

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

This project is most consistent with Authorized Use #2: *Mitigation of damage to fish, wildlife, or natural resources.* Coastal environments and wildlife face a proven and serious hazard from litter and debris at all levels of the ecosystem and food chain. The limited landfill facilities, harsh environment, and an active fishing industry across the Borough damages fish, wildlife, and natural resources. Fish and birds consume toxic plastic or become entrapped in litter and old fishing gear. Other litter and debris pollute creeks, rivers, and the coastal water, and combine for a negative impact on the environment as a whole. Removing the litter and debris will mitigate the damage caused by human activity to fish, wildlife and other natural resources of the coastal areas and will result in a healthier ecosystem.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

The Lake and Peninsula Borough will work jointly with IGAP when possible and possibly other federal and state agencies if litter or debris are discovered that may need permits for removal and disposal.

COST SHARING OR MATCHING OF FUNDS

CIAP funds are not intended to be used for a match, but will ideally supplement other funds and in-kind resources.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM

Lake and Peninsula Borough

PROJECT TITLE: Anadromous Stream Culvert Replacement to Mitigate Impacts to Fish

PROJECT CONTACT

Contact Name: Jordan Keeler, Lake and Peninsula Borough
Address: PO Box 495 King Salmon, AK 99613-0495
Telephone Number: (907) 246-3421
Fax Number: (907)246-6602
Email Address: jordankeeler@lakeandpen.com

PROJECT LOCATION

The City of Chignik and the Iliamna-Nondalton Road (see maps)

PROJECT DURATION

1 Year

ESTIMATED COST

Spending Estimate ($)				
TOTAL	**Year 1**	**Year 2**	**Year 3**	**Year 4**
100,000	10,000	90,000	0	0

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
100,000	0.00	0.00	50,000	50,000

PROJECT DESCRIPTION

The Lake and Peninsula Borough will replace four culverts, two in the City of Chignik (also known as Chignik Bay) and two along the Iliamna-Nondalton Road, in order to re-establish a healthy and natural current that is conducive to travel for salmon.

The problem culverts in Chignik and the Iliamna-Nondalton Road currently impede the passage of salmon to their spawning and overwintering habitat. Salmon runs in the Chignik region are currently below historical levels in Chignik and the impact of partially impeded passage through poorly designed culverts is a known factor in decreased runs. Salmon are the main source of protein for the predators in the area and an integral part of the local ecosystem. Each salmon run that returns with lower numbers places additional stress on predators in the area. The two culverts along the Iliamna-Nondalton Road are deteriorating and are also impeding the natural flow of anadromous streams and have an adverse impact on the salmon as well as the predators that depend on them.

The replacement of the four culverts will allow the salmon to pass through the culverts in a natural manner. Replacement will be a two year process. Year one will include the design and engineering of the culverts to proper standards to ensure the replacement culverts will be installed correctly to allow fish passage and will withstand the traffic flow and climatic challenges. The second year of the project will be the actual removal of the old culverts and installation of the correctly designed and engineered culverts.

MEASUREABLE GOALS AND OBJECTIVES

- Replacement of four culverts to improve fish passage.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

The culvert replacement project is consistent with Authorized Use #2: *Mitigation of damage to fish, wildlife, or natural resources.* The culverts that are currently impeding flows in anadromous streams are adversely impacting the salmon population along with the predators and ecosystem as a whole that depend on the salmon. Replacing these culverts will restore the damage caused by decreased runs and bring the streams back to their historically healthy states. Culvert replacement to improve and restore the flow of anadromous streams is commonly recognized across the State as a sound practice with a positive impact on the environment.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

There will not be any coordination with federal resources or programs, but the culverts will be brought up to standards dictated by the Borough's coastal zone management program.

COST SHARING OR MATCHING OF FUNDS

CIAP funds would not be used for cost sharing or as a match.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM

LAKE & PENINSULA BOROUGH

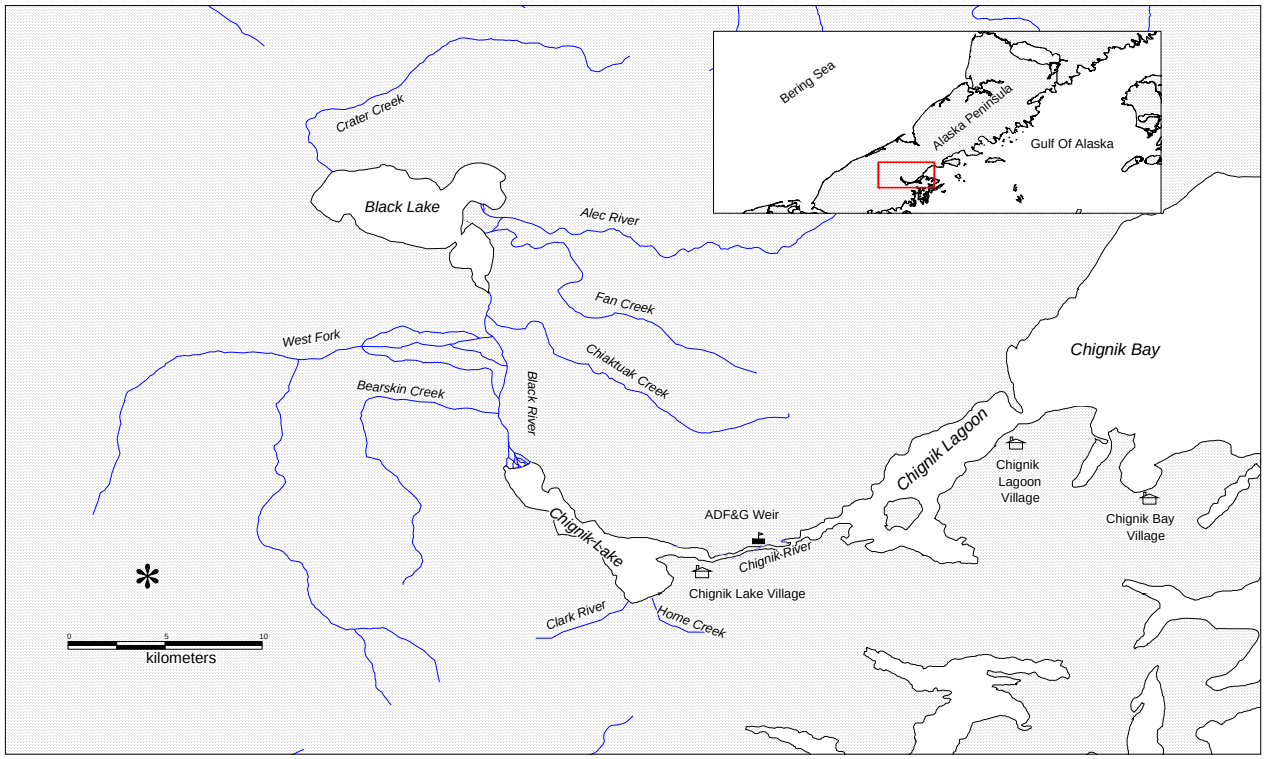
PROJECT TITLE: The Black Lake Conservation, Protection and Restoration of Fish and Wildlife Habitat Project

PROJECT CONTACT

Contact Name: Jordan Keeler, Community Development Coordinator
Address: P.O. Box 495 King Salmon, AK 99613
Telephone Number: (907) 246-3421
Fax Number: (907) 246-6602
E-mail Address: jordankeeler@lakeandpen.com

PROJECT LOCATION

Black Lake is on the South Side of the Alaska Peninsula near Chignik and is located in the coastal zone.



PROJECT DURATION

Two years.

ESTIMATED COST

Spending Estimate ($)				
TOTAL	**Year 1**	**Year 2**	**Year 3**	**Year 4**
$100,000	$90,000	$8,000	$0	$0

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
$100,000	0.00	0.00	50,000	50,000

PROJECT DESCRIPTION

1. The Problem:

The direct statement of the problem is that Black Lake has lost 40% of its volume in recent years and with it key fish and wildlife habitat. It is approaching a critical tipping point in timing in terms of addressing this problem. Unless steps are taken to analyze current and new data about the nature of and extent of the problem and immediately embark on a restoration effort on the lake, Black Lake may reach the "point of no return," at which no one can reverse its decline. If that were to happen, fish and wildlife as well as the people of the region would lose a highly important and biologically productive natural resource.

Salmon habitat in upper Chignik watershed has changed significantly since the 1950s, based on photographs and physical measurements of the lake. These changes are believed to have resulted from channel migration of the West Fork River (circa 1970), which is a large tributary to Black River that connects Black Lake to Chignik Lake. The West Fork River collects glacial runoff, rainfall, and groundwater from Mount Veniaminof, an active 8,400 ft volcano, and transports significant quantities of volcanic sand to Black River approximately 4.5 km below Black Lake. The combination of these and other forces has resulted in the lake losing much of its volume and with that its ability to support fish spawning and rearing activities.

One critical life stage for Sockeye salmon is the time (up to two years) during which the juvenile salmon rears in fresh water lakes. After they have grown to a certain size they migrate out of the lake and to the ocean as 'smolts' and rear in the ocean for several years before returning to their natal streams to spawn in the rivers and streams near the rearing lake and start the cycle all over again. The Black Lake system is made up of two lakes in tandem – Black Lake empties into Black River which empties into Chignik Lake which then empties into Chignik Lagoon which opens onto the salt water ocean environment. Black Lake sockeye that used to spend their entire fresh water stage in Black Lake now often migrate down to Chignik Lake and compete with the sockeye stocks that spawn in the tributaries of Chignik Lake.

Sockeye systems are either limited in their fresh water salmon habitat by the amount of spawning area or by the capacity of the lake to provide food for the juvenile salmon. Chignik has its rearing capacity very limited. The lakes were already small compared to the size of the spawning grounds.

Degradation of the fresh water sockeye salmon habitat of Black Lake has led to decreasing Black Lake salmon production. The five year rolling average of the number of sockeye that the Black Lake system is producing (i.e. the estimated number of out migrating sockeye smolt) has ranged from 12 million to 26.4 million between 1997 and 2005 but has dropped to 6 million in the past several years reflecting consistent *severely reduced* sockeye smolt outmigration.

2. Why it exists:

Black Lake has always been a shallow lake. In the 1960's before lake volume began decreasing the average depth was 8.5 feet. However, the lake has now lost approximately 40% of its volume. The entire volume of Black Lake is penetrated by light (euphotic volume is 100% of total volume) so any loss of lake volume is a loss of salmon habitat.

Any further loss of water volume in Black Lake risks the collapse of salmon habitat. This is a moment in time when the federal, state, and local governments are acutely needed to help address this serious problem before it becomes unsolvable.

3. How the long range project, of which this program is only a part, will address the problem:

The potential benefits of lake level stabilization or restoration include preserving and increasing the carrying capacity of Black Lake and reduced potential for high mortality due to low oxygen levels in the lake during winter.

The total long range project (of which this grant application covers only a part) is to complete data gathering; analyze the data, and develop an engineering design to stabilize and restore the salmon habitat of Black Lake. This would then be followed by outreach to communities to develop a consensus on what remedial steps will need to be taken that will address the dewatering of the lake and help restore it by making it deeper through its ability to hold more water with the many benefits that will come from that to fish and wildlife in the area and region.

4. Goals of the Current CIAP Project Proposal:

The goals of the current CIAP project proposal are only for a part of this total project scope.

Critical in determining the rate of loss of lake volume and corresponding fisheries habitat degradation is quantifying the rate of erosion at the outlet of Black Lake. The proposal herein will ensure that objective, quantifiable information are collected to explicitly

determine how much erosion is occurring. The program entails the setting of two permanent survey benchmarks where Black Lake and Black River converge. Four transect points or sites will be permanently established in the lake outlet reach to where periodic but no less than four cross-section transects will be made at each of the four selected locations, annually. Seasonal transect data will be collected and a registered surveyor will be used to set the two benchmarks to ensure that all elevation data are standardized. Survey equipment and a portable hydro acoustic sounder will be used for data collection. Annually, a detailed report will be prepared and published. The report will include full graphics to allow easily understanding and transmittal of the data to all levels of readers.

MEASUREABLE GOALS AND OBJECTIVES

The measureable goal and objective for this project is to: (1) set two permanent survey benchmarks where Black Lake and Black River converge; (2) in each year of the project collect a minimum of four cross-section transects at each of four selected locations near where Black Lake and Black River converge; and, (3) Annually, a detailed report will prepared and published that will include full graphics to allow easily understanding and transmittal of the data to all levels of readers.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

Authorized Use # 1:

The primary "Authorized Use" for this project is Authorized Use # 1, projects and activities for the conservation, protection, or restoration of coastal areas, including wetland.

The current project if funded would advance the cause of the long range project to mitigate the impacts the reduced water is having on fish, wildlife and the natural resources of Black Lake area. by: (1) ensuring that objective, quantifiable information are collected to explicitly determine how much erosion is occurring; and, (2) ensuring that all elevation data are standardized.

Future analysis of the data produced will assist the Lake and Peninsula Borough, in working with the Chignik Regional Aquaculture Association (CRAA), the Chignik Area Communities, the U.S. Army Corps of Engineers, the ADF&G, and others to develop a consensus understanding of the specific dynamics of the lake and its watershed and then to commence efforts to rectify that identified problem for the benefit of the fish and wildlife resources of the region.

This initial step is critical to the long range project which is consistent with authorized use #1 in that it will restore critical habitat for fish and wildlife.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

The Black Lake fish and wildlife habitat degradation issue is a matter that would be addressed in part by the authorization in 2007 for a Corps of Engineers project to help

address the loss of water volume and resultant fish and wildlife habitat at Black Lake. That authorization was in Public Law 110-114 (the 2007 Water Resources Development Act). To date, there have been no funds appropriated to go with that authorization. That is being sought at this time. An approved project through the CIAP program supported at the Borough level would assist in securing appropriations for the existing authorization.

COST SHARING OR MATCHING OF FUNDS

The Lake and Peninsula Borough is not intending currently to utilize the requested CIAP funds for matching purposes since the funding being sought are new federal appropriations. However, to the extent that the Lake and Penn Borough assigns some funding amount to this project, that fact will be helpful to the project's ability to seek and obtain funding from other sources be it federal, state, or foundation funding. Therefore, the Lake and Peninsula Borough wishes to highlight that any amount of funding will be very helpful to the overall success of this project.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PROGRAM

Lake and Peninsula Borough

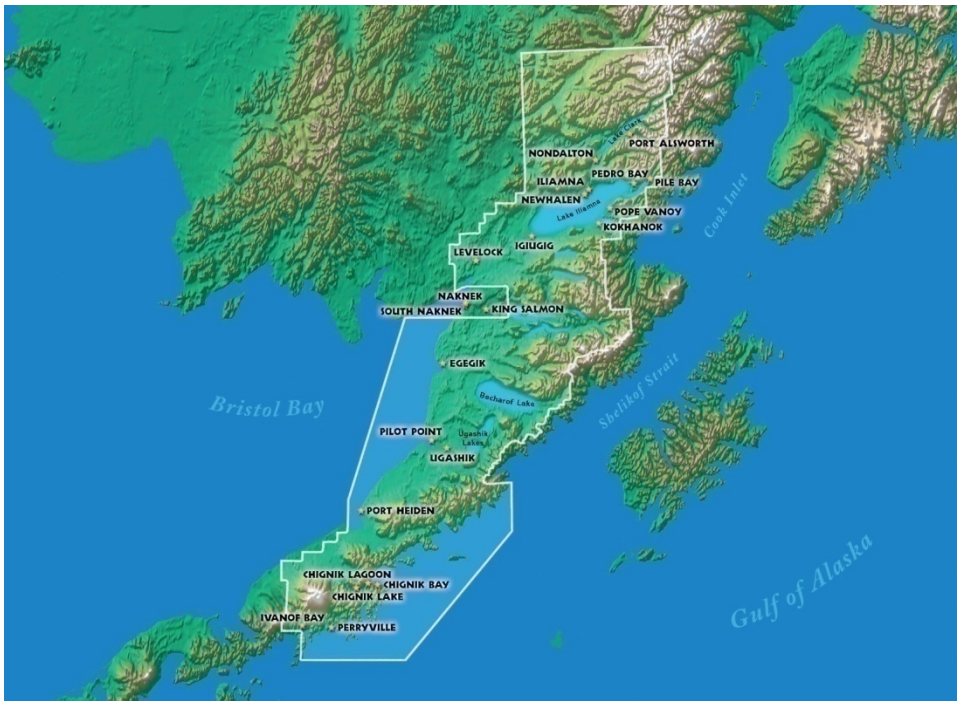
PROJECT TITLE: Administrative Costs for the Implementation of CIAP – Lake and Peninsula Borough

PROJECT CONTACT

Contact Name: Jordan Keeler, Community Development Coordinator
Address: PO Box 495 King Salmon, AK 99613-0495
Telephone Number: (907) 246-3421
Fax Number: (907)246-6602
Email Address: jordankeeler@lakeandpen.com

PROJECT LOCATION

The administrative offices for the lake and Peninsula borough are located in King Salmon.



PROJECT DURATION

4 years

ESTIMATED COST

Spending Estimate ($)				
TOTAL	**Year 1**	**Year 2**	**Year 3**	**Year 4**
53,764	13,441	13,441	13,441	13,441

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
53,764	0.00	0.00	26,882	26,882

PROJECT DESCRIPTION

The purpose of this project is to provide for planning and administration for the Borough's CIAP projects. The Lake and Peninsula Borough will provide oversight for all of the projects that are funded through this grant program. Specific tasks and expenses included in this project include:

- Travel related to CIAP for the Lake and Peninsula Borough's staff
- Preparation of project summaries for the State of Alaska CIAP plan.
- Preparation of final grant proposals for submission to the Minerals Management Service on grants.gov.
- Recruiting and selection of staff and/or contractor(s) to implement CIAP projects
- Completion of reporting on grants.gov and other administrative requirements
- Providing guidance to project leaders and oversight of project implementation

MEASUREABLE GOALS AND OBJECTIVES

- Provide project summaries to the State of Alaska for inclusion in the Alaska CIAP plan
- Submit full project proposals on grants.gov
- Establish a coordination system among project leaders for project implementation and completion
- Set up a reporting system to get information from project leaders
- Ensure submittal of timely narrative and financial reports on grants.gov
- Communication with State of Alaska and MMS staff
- Submit annual amendments/revisions for state plan as needed

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

This project is consistent with Authorized Use 3, *"Planning assistance and the administrative costs of complying with CIAP."* This project will provide administrative support for the implementation of the CIAP program.

COST SHARING OR MATCHING OF FUNDS

CIAP funds would not be used for cost sharing or as a match.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PLAN

LAKE AND PENINSULA BOROUGH

PROJECT TITLE: Lake and Peninsula Borough Mapping Update for the Protection of Critical Coastal Resources and Identification of Land Status

Note: This project was approved as a Tier 1 project in the 2008 Alaska CIAP Plan. It had been moved to a Tier 2 project and the project contact has changed. Otherwise, the project remains unchanged.

PROJECT CONTACT

Jordan Keeler
P.O. Box 495, King Salmon, AK 99613
Phone: 907-246-3421
Fax: 907-246-6602
Email: marvsmith.lpboro@starband.net

PROJECT LOCATION

Lake and Peninsula Borough

PROJECT DURATION

1 year

ESTIMATED COST

Spending Estimate ($)	
TOTAL	**Year 1**
10,000	10,000

PROJECT DESCRIPTION

The Lake and Peninsula Borough (LPB) encompasses a land area of nearly 28,890 square miles. All of the land within the Borough boundaries, except for perennially snow-capped mountains, glaciers, and volcanoes are located within the coastal zone. The Borough does not currently have a comprehensive map in GIS format readily available for public use. Such a map is needed for the borough, the public, and agencies alike to access current and accurate information to effectively implement the Alaska Coastal Management Program (ACMP). This project will involve hiring a contractor to develop a comprehensive GIS map. The map will show geographic features (e.g. wetlands, estuaries, streams, beaches) and will identify all land status (federal, state, borough and privately owned) within the Borough boundaries. This project will incorporate the map into the Borough Geographical Information System (GIS) providing the capacity to

reproduce the map and update it when land status changes. The map will be produced in several formats and distributed throughout the Borough. Two 8 foot by 6 foot copies will be displayed on the walls within the Lake and Peninsula Borough offices (one upstairs and one downstairs). These copies will be framed and covered in Plexiglas to protect them from damage by usage. Additionally, each Borough school, city and village council will receive a framed 2 foot by 4-foot version of the map to display in their School or community building. The Borough will initiate an amendment to the Lake and Peninsula Borough Coastal Management Plan to include the map within the plan.

The map will assist in the protection of natural resources within the Lake and Peninsula Borough. When projects in the Borough are identified for review through the ACMP or for resource extraction, the Borough will be able to easily identify natural resources and sensitive habitats in the area, and know who the actual landowners and neighboring landowners are that could possibly be affected. This will assist the Borough in effectively participating in the ACMP consistency review process and assuring protection of coastal areas. It will also assist the Borough in the notification process of the project review by ensure all parties affected are properly notified and have the opportunity to comment. Additionally, the map will assist the Borough in the large task of managing the 125,000 acres of Municipal Land Entitlements the Borough has received or will be receiving in the future from the State of Alaska.

There are a large number of mining claims and mineral extractions that are presently occurring, or will be occurring, in the future within the Borough boundaries. This project will increase the Borough's ability to clarify their locations and review extraction proposals. Two recent mining proposals were directly located on beaches where resource usage is a conflict between fishermen and mining claims.

MEASURABLE GOALS AND OBJECTIVES

This project will result in a Borough wide map, in GIS format showing geographic features (e.g. wetlands, estuaries, streams, beaches) and land status (federal, state, Borough or private ownership). The map will be reproducible on the Borough plotter and easily updated. Large format prints will be displayed in the Borough offices (approximately 6 feet by 8 feet) and in the Borough schools, cities, and village offices (approximately 2 feet by 4 feet). The map will be submitted to the State of Alaska as an amendment to the Lake and Peninsula Coastal Management Plan.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

This project addresses CIAP authorized use 4: *Implementation of a federally-approved marine, coastal or comprehensive conservation management plan.* This project will result in a comprehensive map providing information necessary to effectively implement the Alaska Coastal Management Program. The ACMP is a federally approved program. As a component of the ACMP, the Lake and Peninsula Borough Coastal Management Plan is also federally approved. Projects within the coastal zone that require state or federal authorizations, or are a federal activity must be consistent with state standards and the Borough's enforceable policies. When a project comes up for a coastal consistency review in the Borough the map will be available at the Borough and in each community

to identify the geographic features that support such resources as salmon spawning grounds, eel grass beds, bird nesting areas and other critical wildlife habitat that could possibly be affected by development projects. Easy identification of such areas will facilitate the effective implementation of the ACMP state standards including the following:

- 11 AAC 112.210 Natural Hazards
- 11 AAC 112.230 Energy Facilities
- 11 AAC 112.240 Utility Routes and Facilities
- 11 AAC 112.260 Sand and Gravel Extraction
- 11 AAC 112.280 Transportation Routes and Facilities
- Habitat 11 AAC 112.300

Each of these standards requires an applicant to avoid, minimize or mitigate impacts to specific areas. The maps will help identify the areas.

The map will be useful for program implementation immediately upon completion. However, amending the ACMP to formally include the map in the coastal plan will expand its availability to the state and federal resource agencies, and the broader public that participates in implementing the ACMP, and may support the Borough's efforts to designate certain areas as important habitat areas, or natural hazard areas.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

The ACMP project review process is a coordinated effort that includes state, federal and borough agencies. Through this process, the Borough regularly coordinates with federal agencies either as an authorizing agent or as a project proponent. Through this regular coordination, the Borough is familiar with the informational needs of the federal agencies. The proposed map will be available to federal agency use

COST SHARING OR MATCHING OF FUNDS

CIAP funds may be used for cost sharing or matching purposes required by another grant. If they are used in this manner, a letter will be included with the CIAP grant application from the other Federal agency (the agency charged with administering the program that includes the cost sharing or matching requirement) indicating that the other agency's program allows the use of Federal funds to meet cost sharing or matching requirements.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PLAN

LAKE AND PENINSULA BOROUGH

PROJECT TITLE: Lake and Peninsula Borough Coastal Management Plan Amendment – Community Outreach Component

> **Note:** This project was approved as a Tier 1 project in the 2008 Alaska CIAP Plan. It had been moved to a Tier 2 project and the project contact has changed. Otherwise, the project remains unchanged.

PROJECT CONTACT

Jordan Keeler
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PROJECT LOCATION

Lake and Peninsula Borough (LPB)

PROJECT DURATION

1 year

ESTIMATED COST

Spending Estimate ($)	
TOTAL	**Year 1**
22,800	22,800

PROJECT DESCRIPTION

The purpose of the project is to supplement the update of the LPB Coastal Management Plan resource inventory information and develop new natural hazards and subsistence designations that will be incorporated into the LPB Coastal Management Plan as a two-year section 309 Enhancement Grants Project.

The LPB encompasses a land area of nearly 28,890 square miles. It also displays considerable topographical and biological diversity between its northern and southern limits, and even varies widely across the Peninsula from the Bristol Bay lowlands on the north to rocky shorelands with glaciers and snow fields adjoining Shelikof Strait and the Pacific Ocean along its southern boundary. The Borough directly adjoins marine waters of Bristol Bay between Port Heiden and Kvichak Bay (north side Alaska Peninsula), and marine waters of the Pacific between Kupreanof

Point and Cape Kilokak (south side Alaska Peninsula). Seventeen communities are present within the borough, and the lifestyle and economies of these communities are highly dependent on the maintenance and continued productivity of Borough coastal resources.

Through the Alaska Coastal Management Program (ACMP), the borough has received approval of a Federal Section 309 Enhancement Grant for state fiscal year 2009. The grant provides funds to complete the following:

- Revise 40 community maps to conform to the ACMP requirements. The maps will show natural hazard areas to be included as designated areas within the LPB Coastal Management Plan. Thirty-one of the maps will include subsistence use areas to be included as designated areas within the LPB Coastal Management Plan.
- Revise the resource inventory of the LPB Coastal Management Plan to include information to justify designation of new subsistence use areas.
- Research existing Alaska Department of Fish and Game (ADF&G) documented subsistence studies to gather the information needed to justify the designations. The consultant would review the more than 40 ADF&G technical papers on subsistence in the Southwest Region of Alaska and compile them as appropriate to develop additional subsistence designations.

As proposed, the Section 309-funded natural hazards and subsistence designations would be developed based solely on a literature search. The only community outreach and "ground-truthing" would occur through interaction with the LPB Planning Commission at monthly meetings via teleconference. If the CIAP funds were made available to supplement the 309 project, the project would be significantly improved by adding a local knowledge component. CIAP funds would be used to travel to the seventeen communities located within the coastal zone of the Lake and Peninsula Borough to meet with community representatives, ground-truth results of the literature search and ensure that local knowledge is incorporated into the development of natural hazard and subsistence designations.

MEASURABLE GOALS AND OBJECTIVES

1. Forty community maps. The maps will show natural hazard areas to be included as designated areas within the LPB Coastal Management Plan. Thirty-one of the maps will include subsistence use areas to be included as designated areas within the LPB Coastal Management Plan. The proposed designated areas on the maps will reflect the findings of the community meetings and verified in the field.

2. A revised resource inventory to the LPB Coastal Management Plan that includes local knowledge to justify designation of new subsistence use areas.

3. A report summarizing the information discovered in the research of technical papers on subsistence in the Southwestern Region of Alaska and confirmed through personal contact with the 17 communities in the borough and verified in the field.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE

This project addresses CIAP authorized use 4: *Implementation of a federally-approved marine, coastal or comprehensive conservation management plan.*

This project will result in improvements to the LPB Coastal Management Plan. Once approved by the state and the National Oceanic and Atmospheric Administration, the plan becomes a component of the Alaska Coastal Management Program, a federally approved program established under the federal Coastal Zone Management Act. The information generated by this project will help the LPB, state and federal agencies, and developers implement the ACMP when projects are proposed for development within the coastal zone. Specifically, the information is needed to implement the LPB natural hazard and subsistence enforceable policies, the state ACMP natural hazard standard at 11 AAC 112.210, and the state ACMP subsistence standard at 11 AAC 112.270. The ACMP regulations *require* that natural hazard and subsistence use designations be made in order to apply the standards and enforceable policies

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS

This CIAP project builds on a project funded by a federal 309 Enhancement Grant. The 309 grant has been awarded to the LPB by the Alaska Department of Natural Resources, Division of Coastal and Ocean Management (DCOM). Per the federal requirements regarding Section 309 funding, the project will result in a change to the Alaska Coastal Management Program. DCOM has reviewed both the 309 grant proposal and this proposal to insure they compliment each other and do not duplicate efforts.

COST SHARING OR MATCHING OF FUNDS

CIAP funds may be used for cost sharing or matching purposes required by another grant. If they are used in this manner, a letter will be included with the CIAP grant application from the other Federal agency (the agency charged with administering the program that includes the cost sharing or matching requirement) indicating that the other agency's program allows the use of Federal funds to meet cost sharing or matching requirements.

STATE OF ALASKA
COASTAL IMPACT ASSISTANCE PLAN

LAKE AND PENINSULA BOROUGH

PROJECT TITLE: Lake and Peninsula Borough Beach Erosion Tracking Program and Community Profile Map Additions and Updates

> **Note:** This project was approved as part of the 2008 Alaska CIAP Plan as a tier 1 project. The only changes have been a revision in funding per allocation year of CIAP and project contact. It has also been moved to Tier 2.

PROJECT CONTACT

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PROJECT LOCATION

Lake and Peninsula Borough (L&PB)

PROJECT DURATION

3 years

ESTIMATED COST

Spending Estimate ($)			
TOTAL	**Year 1**	**Year 2**	**Year 3**
105,273	36,237	34,518	34,518

Funding per Allocation Year of CIAP ($)				
TOTAL	**FY 07**	**FY 08**	**FY 09**	**FY 10**
105,273	0	0	70,755	34,518

PROJECT DESCRIPTION

The purpose of this project is to establish a Borough Beach Erosion Tracking Program within the borough in order to protect the natural resources on the coastal shores within the Lake and Peninsula Borough. This will be accomplished in two manners with aerial photography mapping and by using a wooden stake measuring system to track erosion.

The aerial photography and mapping will be accomplished with in and near the communities within the Lake and Peninsula Borough that are experiencing significant erosion problems that impact key ocean front habitat and could possibly affect key infrastructures near the beach. This mapping will be accomplished in specific identified areas near the communities that were not

mapped during the original borough mapping project. In addition we will remap areas where significant erosion has occurred or is occurring presently near the communities. The goal is to have aerial photography that is approximately 5 years apart for historical data. The measurable objective will be to identify the loss of beach in feet on an annual basis from each community that is identified in the study.

The L&P Borough will work together with the L&P Borough School District and the individual local school in each community as a school project to participate in this Beach Erosion Tracking Program. To go along with the mapping the school children and class will develop a method to track the erosion in the community from a known location. For example in the Community of Levelock the School Teacher Housing is approximately 150 feet from the Bristol Bay shore and Kvichak River Bank. *This* portion of the river is very tidally affected and the bank of the Kvichak River can loose 10 feet in one storm. The soil composition here is a silt and sand combination with small alder vegetation growth that periodically fall into the river during an active storm. The possibility of doing a bank stabilization project here is very unlikely as the soil is too sandy and the wave and tidal action too strong along with the normal river current.

We propose to install a wooden stake tracking system from the comer of the teacher housing to the river or beach bank by installing wooden stakes every ten feet from the corner of the housing to the river/beach bank. The stakes would be installed in a straight line with numbers painted on each stake to track the number of stakes to reach the shoreline. In addition to *this* specific location, the school children will pick two other locations in the community to install this wooden stake tracking system to identify the amount of erosion that occurs annually in these locations. The students will also provide photos at least three times each school term of the current erosion loss identified at the selected erosion points in each community.

Another community that has lost approximately 200 feet of beachfront in the last 6 years is Port Heiden. They presently have the potential to loose a fuel service header due to significant erosion within the next year. The soil composition here is a silt and sand combination that has only tundra vegetation growth that periodically fall into the river during an active storm. The possibility of doing a bank stabilization project here is very unlikely as the soil is too sandy and the wave and tidal action too strong.

We are also proposing to partner with the Port Heiden School or the City to install the same stake tracking system from the comer of the Port Heiden Fuel Storage facility to the beach and passing the fuel header with that straight line of wooden stakes with numbers. In addition, the school children will identify two other locations in the community to install this wooden stake tracking system to identify the amount of erosion that occurs annually in these locations. The students will also provide photos at least three times each school term of the current erosion loss identified at the selected erosion points in each community.

The borough will encourage each community school within the borough that has an erosion problem in their community to install the wooden stake tracking system and participate in the erosion tracking program. The mapping along with the wooden stake tracking system will, through a period of time, provide a matrix to predict the possible future erosion that could occur in each community. Most importantly, this project will provide justification to State and Federal

agencies for funding to move valuable infrastructure, such as fuels storage tanks located near the shoreline or river banks that could cause environmental damage to the local beach and to the coastal waters of Alaska if damaged by erosion.

MEASURABLE GOALS AND OBJECTIVES
This project will result in the following outcomes:

1. A report documenting beach loss due to erosion in at least three coastal communities.

2. Community profile maps that identify erosion prone areas through aerial photography in at least three coastal communities.

3. A wooden stake tracking system to accurately measure distances from known infrastructure locations to the beach erosion points in at least two communities.

PROJECT CONSISTENCY WITH CIAP AUTHORIZED USE
This project addresses CIAP authorized use 1: *Projects and activities for the conservation, protection, or restoration of coastal areas, including wetlands.* The erosion mapping and tracking information will assist in the protection of coastal areas. When projects come up for a coastal consistency review in the borough these maps and erosion tracking information will be used to make key decisions. There will be data to determine the impact proposed projects could have on the local environment and determine the most appropriate location for projects in relation to nearby erosion impacted shorelines, salmon spawning grounds, eel grass beds, bird nesting areas and other critical wildlife habitat that could possibly be impacted if a project were placed in a certain location.
The data on erosion will also show potential risks to infrastructure thereby providing support for hazard mitigation projects that may prevent the damage from occurring. Damage to infrastructure from erosion has the potential to impact coastal areas through increased marine debris, oil spills, landfill failure, etc. Projects that prevent such damage help to protect coastal areas.

COORDINATION WITH FEDERAL RESOURCES OR PROGRAMS
The borough has not coordinated this project with any other federal resources or programs.

COST SHARING OR MATCHING OF FUNDS
CIAP funds may be used for cost sharing or matching purposes required by another grant. If they are used in this manner, a letter will be included with the CIAP grant application from the other Federal agency (the agency charged with administering the program that includes the cost sharing or matching requirement) indicating that the other agency's program allows the use of Federal funds to meet co