

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Shishmaref Relocation Strategic Plan
January 2002



Introduction

The community of Shishmaref has determined that the threat to life and property from reoccurring beachfront erosion requires immediate action. The community has taken the first step by establishing an erosion and relocation coalition made up of the governing members of the City, Indian Reorganization Act (IRA) Council and Shishmaref Native Corporation Board of Directors. Faced with the decision of whether to remain at its present location or to move, the majority of the community is in favor of moving. This plan is a guideline to assist the community as well as state, federal, and other agencies in assisting Shishmaref with an orderly relocation.

Background

Shishmaref is located approximately 30 miles south of the Arctic Circle and 50 miles northeast of the Bering Straits. The community is currently home to 600 people mostly consisting of Native Inupiaq Eskimos. The community is a traditional Eskimo village that is heavily reliant on subsistence lifestyle activities based in and around the Chukchi Sea. The local economy is subsistence based, and supplemented by part time wage earnings and local sales of arts and crafts. In addition, the community has a

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Tannery and two stores, Washeteria, 1-fastfood restaurant, school K-12th grade, health clinic, post office, Community Center, City Library, Church, youth center, Learning center, Shishmaref Village Corporation, AVEC, Shishmaref Emergency Services, Kawerak (Transportation, Head start, Village based Coordinators, Employment Education and Training, VPSO Program, Youth Development Coordinators) and various local government offices (City, Ira Council, Alaska Army National Guard, Alaska State DOT&PF) and other outside businesses providing services essential to everyday living. Although 600 people live in Shishmaref, a noticeable number of individuals have relocated to other parts of Alaska. This is due to the fact that the island can no longer expand services needed for increased development of new construction of homes and related infrastructure. The family population has increased in the past 10 years. The community can no longer ignore the fact that the living conditions are comparable to third world Nations. Most families do not have running water and sewer services in their homes. The lack of roads, high costs of fresh foods, inadequate fuel storage for home heating and transportation, exorbitant cost of basic services and the constant anxiety caused by the erosion is an excessive burden carried by all members of the community.

The community of Shishmaref is situated on a barrier island no wider than 1/4 mile, and 3 miles in length. The island is comprised of fine sand deposits and permafrost that is vulnerable to erosion. The community has experienced erosion of its north shoreline an average of 3-5 feet per year, except for the storms of: November 9&10, 1973, October 4, 1997, and October 7, 2001 where extensive erosion in highly vulnerable areas was as much as 125' horizontal distance. We also are experiencing erosion of the southern side of the island, which is noticeably reducing the size of the island. The community is most vulnerable when tidal high water is combined with intense wave action of the Chukchi Sea during storms. Erosion has been heightened by continual degradation of permafrost. An average high tide is 3 feet above the normal tide, during storms; the wave action can increase the high tide by 3 feet, which causes the waves to crest over the bluff.

During the aftermath of the 1973 storm a community meeting was held with the local entities along with Natural Resources Conservation Services (NRCS), Department of Community and Regional Affairs (DCRA), and U.S. Army Corps of Engineers assessing the extent of the existing, potential and projected erosion problems at Shishmaref. A decision was made by the community to relocate to the mainland to Nunatuk 6 miles south from the existing community. However, in August 1974 the community reversed its position and determined not to relocate but to focus on providing protection along the beachfront to protect the community for another twenty years. During August 1974, 50,000 sand bags were put along the worst hit areas of Shishmaref protecting homes and retail infrastructures. The protection worked for 24 years, however as a result of the 1997 storm, the State of Alaska declared Shishmaref a disaster area and requested Federal assistance in relocating 13 residential homes to higher more protected areas in the newly platted residential site on the old airport. All homes were successfully relocated using local labor with assistance from the Alaska Division of Emergency Services. The most recent storm of October 5, 2001 resulted in the Governor of Alaska,

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Tony Knowles, issuing an administrative order that stated “Not doing anything would pose an imminent and continuing threat that justified the State taking action to provide some kind of protective measure along the shoreline of Shishmaref”. An appropriation of \$110,000.00 was awarded to complete the project, of which \$85,000.00 was identified for the community of Shishmaref (via Kawerak, Inc.) to aid in temporary sand filled gabions along the worst hit areas of the community.

Situation

The loss of land through erosive action and increasing risk to property and lives has caused a dangerous situation for the community of Shishmaref. The community has determined that staying on the island to face the ever-present threat from ocean-based storms is unacceptable. The only viable solution is to relocate the community off the island to a nearby mainland location that is accessible to the sea, suitable for the subsistence lifestyle of the community, and preserves the culture and integrity of the community.

Objective

Relocation of the community of Shishmaref to a site selected, planned and located on the mainland by April 30, 2009.

Action Plan

1. Identification of High Potential Relocation Sites

Scope of work:

The community must identify potential relocation sites. The Coalition will contact appropriate agencies to gather information essential for a successful relocation. We will use each agency’s input to eliminate potential problematic relocation sites. At a minimum, we will gather the following information to aid us in identifying the sites with the highest potential for success of the relocation:

- Soil to support infrastructure requirements
- Size minimums to address community growth
- Access: Land, Water, Air
- Subsistence
- Develop Site Evaluation Matrix

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

2. Identification of Required Evaluations and Studies

Scope of work:

The community must identify hydrological, geotechnical, environmental, and other studies related to the successful relocation site. At a minimum, we will contact the appropriate agencies for required studies, and the successful completion of those studies required. Information gathered will be used for the successful selection of a relocation site.

- National Environmental Policy Act (NEPA)
- Geotechnical Studies
- Hydrological Studies
- Other studies (Site specific)

3. Infrastructure Development

Scope of work:

The community must identify infrastructure development needed for the successful development of a new site for the community of Shishmaref. The Coalition will hold community meetings and invite various governmental agencies to these meetings to develop an infrastructure development needs list identified by the community for a successful relocation. Infrastructure needs are as follows:

- Transportation
- Roads & Trails
- Airports
 1. Terminal
 2. Runways
 3. Freight storage facilities
 4. Equipment storage facilities
- Harbors
- Power/communications
- Telephone/Internet
- Electricity
- Cable/Internet
- Modern Water & Sewer
 1. Water Source & Treatment
 2. Sewage treatment & Disposal
- Washeteria
- Landfill site
- Housing

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

- Evaluation of existing homes for relocation
- Existing homes relocation
- Planned additional home construction
- Healthcare
- Health Care Services
 1. Facilities
- Clinic Relocation
- Education
- Evaluate Services to determine facility needs
- Facilities Relocation
- New Construction
- Native Corporations
- Land Development
 1. Housing
 2. Roads
 3. Infrastructure Services
 4. Easements
 5. Gravel Fill
- Businesses
 1. Store(s)
 2. Fuel storage
 3. Ware houses
 4. Bed & Breakfast
 5. Home Based Businesses
 6. Tannery
 7. Other (including new)
- City Government
 1. Facilities needed for Governmental Services
 - a) Emergency Services
 2. Office Relocation
- Tribal Government
- Governmental Services Facilities
- Office Relocation
- Relocation Project Coordination
- Multipurpose building
- Head start building
- Cultural Center
- Community play ground
- Churches
 1. Cemeteries
 2. Evaluation of Facility needs
- Post Office

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

4. Identification of Community Needs and Wants

Scope of work:

The Coalition will hold public meetings within the community to identify the community needs and wants. The information gathered will be used to develop a community better suited to provide services needed for the new community. The information gathered will be used to add to the list of community needs and wants identified:

- Running water and flush toilets
- Adequate landfill site
- Recreation Center
- Centralized Governmental office buildings
- Adequate snow removal equipment
- Washeteria
- New power generator system
- Dock facilities
- Elder Housing/Center
- Day care facilities
- New Health Clinic
- Police building-separate
- Search and Rescue building
- New Post Office
- New School Facilities
- Public Library
- Youth Center
- Cemetery and Grave Sites
- Recreational Park
- Visitor Center
- Museum
- Restaurants
- Carving Center-Kasghi
- Boardwalks or sidewalks
- Fire Station
- Community Hall
- Safe House
- Armory
- More employment
- Airport & Terminal Facilities
- Roads

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

- Lodging
- Heavy equipment
- Cultural Center

5. Development of Agreements and time targeted actions

Scope of work:

The Coalition will identify Agreements and timed target actions needed to follow to ensure successful relocation of the community. These actions will be developed once the comprehensive plan for relocation is developed:

- Identification of preferred site-January 2003
- Other agreements/timed target actions

6. Identification of salvageable/moveable infrastructure/facilities

Scope of work:

The Coalition will develop a list of salvageable/moveable infrastructure/facilities in addition to the following:

- AVEC power plant & Bulk tanks
- City Buildings & Bulk tanks
- Shishmaref Native Store, Warehouses & bulk fuel tanks
- Nayokpuk General Store, Warehouses & Bulk tanks
- Shishmaref School buildings-5 & bulk tanks
- Clinic Building
- Tannery Buildings-4
- Shishmaref Lutheran Church/Parsonage building, bulk tank
- City water tanks-2
- National Guard Facilities

7. Timeline infrastructure development
Years to completion (best case scenario)

Scope of work:

The Coalition along with assistance from Kawerak Inc. and the relocation committee must develop an infrastructure development timeline. This list will be developed with outside governmental assistance and input. The timeline will be made to ensure relocation is successful:

- Temporary erosion protection- City of Shishmaref-2 yrs.
- School-Bering Straits School District- 6 yrs.

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

- Clinic–Native Village of Shishmaref – 4 yrs.
- Water-Sewer-Line installation-Native Village of Shishmaref/Alaska Native Tribal Health Consortium-7 yrs.
- Community Streets–City of Shishmaref-6 yrs.
- Access Road to Water-City of Shishmaref-7 yrs.
- Access Road to Nome-City of Shishmaref/ADOT-6 yrs.
- Airport- City of Shishmaref/ ADOT-6 yrs.
- Sewage treatment plant-Native Village of Shishmaref/ANTHC-6 yrs.
- Water treatment plant- Native Village of Shishmaref/ANTHC-6 yrs.
- Power Plant-Alaska Village Electric Cooperative-6 yrs.
- Telephone- Mukluk Telephone Company-6 yrs.
- Cable-Shishmaref Native Corporation-6 yrs.
- Stores
 1. Nayokpuk General Store-6 yrs.
 2. Shishmaref Native Store-6 yrs.
- Washeteria-City of Shishmaref/ANTHC-6 yrs.
- City Offices-City of Shishmaref-6 yrs.
- IRA Offices-Native Village of Shishmaref-6 yrs.
- Multipurpose building-Native Village of Shishmaref-6 yrs.
- Harbors–Native Village of Shishmaref-7 yrs.
- Material source (gravel fill)-Shishmaref Native Corporation/Native Village of Shishmaref/Bering Straits Native Corporation-2 yrs.
- Church-Shishmaref Lutheran Church-6 yrs.

8. Development of Comprehensive Community Plan

Scope of work:

The Coalition will develop a comprehensive plan along with assistance from Kawerak Inc. and local governmental agencies. This plan will be structured to address relocation in detail regarding the following by 2004:

- Land usage-City of Shishmaref/Native Village of Shishmaref/Shishmaref Native Corporation/Kawerak Inc.
- Village layout-City of Shishmaref/Native Village of Shishmaref/Kawerak Inc.
- Lot sizes
- Street and trail system
- Service Providers

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

9. Development of Funding Commitment-Construction Timeline

Scope of work:

The Coalition along with the Relocation Coordination Committee will develop a funding commitment timeline to address the relocation tasks necessary to ensure a successful relocation:

- January 2004

10. Implementation Plan

Scope of work:

The Coalition will select a lead organization locally or regionally to ensure that the tasks for a successful relocation are completed:

- Establishment of Relocation Coordination Committee (members have key responsibilities for various construction/action portions of relocation/infrastructure development.) January 2003

11. Old Site Cleanup Plan

Scope of work:

The Coalition will develop an Old Site Cleanup Plan to ensure a clean environment is left behind:

- Developed by January 2007

12. Identification of Funding Sources and Technical Assistance Resources

Scope of work:

The Coalition will develop a list of funding and technical assistance resources essential to the successful relocation of the community. A comprehensive list of resources will address the infrastructure development needed for the successful relocation of the community. Identify all potential funding sources and state whether they use federal or State funds and applicable matching requirements. Include contact names, addresses, e-mail addresses (if known), telephone and fax numbers. These funding sources will be used to facilitate relocation funding acquisition. The Coalition along with the Relocation Coordination Committee will pursue funding commitments from the resources below:

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Contact Agency Name

Address

E-Mail Address

Phone Number

Fax Number

Funding Source (Private, Federal or State)

Matching Requirements

Local Assets

Federal:

FEMA

130 228th Street, S.W., Bothel, WA 98021-9796

N/A

425-487-xxxx

425-487-xxxx

Federal

75/25 (most programs)

Department of the Interior

1849 C Street N.W Washington DC, 20240

www.doi.gov

202-208-3100

N/A

Federal

N/A

Bureau of Indian Affairs

Bureau of Indian Affairs Juneau Regional Office 709 West 9th, 3rd Floor Federal Building Juneau, AK 99802

bobmartin@bia.gov

1-800-645-8397

1-907-586-7057

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Contact Agency Name	Address	E-Mail Address	Phone Number	Fax Number	Funding Source (Private, Federal or State)	Matching Requirements	Local Assets
Federal							
U.S. Bureau of Land Management Alaska	Division of Wildlife Conservation P.O Box 25526, Juneau, AK 99802-5526	www.blm.gov	907-271-5960	907-271-4418	Federal	N/A	
U.S. Department of Agriculture	800 W. Evergreen Ste 105, Palmer, AK 99645	fmuncy@rdasum2.rurdev.usda.gov	907-761-7705	907-761-7783	Federal	N/A	
U.S. Department of Agriculture	P.O. Box 1569 Nome, AK 99762	tsparks@rdmail.rural.usda.gov	907-443-6022	907-443-6024	Federal	N/A	
U.S. Army Corp. of Engineers	P.O. Box 898 Anchorage, AK 99506-0898	N/A	907- 753-2606	907-753-2625	Federal	25%	
U.S. Environmental Protection Agency	222 W. 7th Ave. #19 Anchorage, AK 99513	wagner.dennisx@epamail.epa.gov	907-271-3651	907-271-3424	Federal	N/A	
Housing and Urban Development	949 East 36th Avenue Suite 40, Anchorage, AK 99508-4399	collen_bickford@hud.gov	907-271-4170	907-271-3778	Federal	N/A	
U.S. Department of Commerce / EDA	550 W. 7th Ave. Ste. 1780 Anchorage, AK 99501	brichert@eda.doc.gov	907-271-2272	907-271-2273	Federal	N/A	

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

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Denali Commission	510 L St.#410 Anchorage, AK 99501	Aewing@denali.gov	907-271-1414	907-271-1415	Federal	N/A	
State:							
Alaska Housing Finance Corporation	P.O. Box 101020 Anchorage, AK 99510-1020	bpickett@ahfc.state.ak.us	907-330-8273	907-338-2585	State	N/A	
AK Department of Transportation / PF	222 W. 7th Ave., Box14 Anchorage, Alaska 99513	tom_brigham@dot.state.ak.us	907-271-5459	907-271-2851	State	N/A	
Department of Health and Social Sciences	Office of the Comm. P. O. Box 110601 Juneau, AK 99811-0601	Karen_Pearson@helath.state.ak.us	907-465-3090	907-586-1877	State	N/A	
Fish and Wildlife	P.O. Box 110610 Juneau, AK 99811	david_thomson@fish.game.state.ak.us	907- 465-4190	907- 465-6142	State	N/A	
AK Department of Education and Early Development	801 West 10th Street, Suite 200, Juneau, AK 99801-2800	N/A	907-465-2800	907-465-4156	State	N/A	
Village Safe Water Program	555 Cordova Street Anchorage, AK 99501	Kurt_Egelhofer@envirocon.state.ak.us	907-269-7601	907-269-7509	State	N/A	
Division of Emergency Services	P.O. Box 5750 Ft. Richardson, AK	ades@ak-prepared.com	1-800-478-2337	907-428-7009	State	N/A	

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Contact Agency Name	Address	E-Mail Address	Phone Number	Fax Number	Funding Source (Private, Federal or State)	Matching Requirements	Local Assets
	99505-5750						
DOT & PF roads, airports and harbors	2301 Peger Road Fairbanks, AK 99709	dave_sanches@dot.state.ak.us	907-451-2385	907-451-2313	State	N/A	
Department of Community and Economic Development	P.O. 110800 Juneau, AK 99811-0801		907-465-2500	907-465-5442	State	N/A	
Department of Community and Economic Development	P.O. Box 1068 Nome, AK 99762	carol_piscoya@dced.state.ak.us	907-443-5459	907-443-2409	State	N/A	
DCED/DCBD	Director, DCBD 550W 7 th Ave, Ste 1770, Anch, AK 99501-3510		907-269-4580		State	N/A	
Department of Environmental Conservation	Juneau Office, ADEC 410 Willoughby Avenue, Juneau, AK 99801-1795		907) 465-5010	907-465-5097	State	N/A	
Bering Straits School District	P.O. Box 225 Unalakleet, AK 99684	www.bssd.org	907-624-3611	907-624-3099	State	N/A	

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

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Local Government						N/A	
City of Shishmaref	P.O. Box 83 Shishmaref, AK 99772	N/A	907-649-3781	907-649-2131	Private	N/A	
Shishmaref IRA Council	P.O. Box 72110 Shishmaref, AK 99772	jeanette@kawerak.org	907-649-3821	907-649-2104	Private	N/A	
Regional Corporations/Profit/Non-profit							
Kawerak, Inc.	P.O. Box 948 Nome, AK 99762	ruby@kawerak.org	907-443-5231	907-443-4452	Private	N/A	
Bering Straits Native Corporation	P.O. Box 1008 Nome, AK 99762	www.beringstraits.com	907-443-5252	907-443-2985	Private	N/A	
Norton Sound Health Corporation	P.O. Box 966 Nome, AK 99762	N/A	907-443-3311	N/A	Private	N/A	
Nome Eskimo Community	P.O. Box 1090 Nome, AK 99762	bunny@kawerak.org	907-443-2246	907-443-3539	Private	N/A	
Sitnasuak Native Corporation	P.O. Box 905 Nome, AK 99762	N/A	907-443-2632	907-443-3063	Private	N/A	

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

Contact Agency Name	Address	E-Mail Address	Phone Number	Fax Number	Funding Source (Private, Federal or State)	Matching Requirements	Local Assets
Rural Alaska Community Action Program	P.O.Box 200908 Anchorage , AK 99520	cook@citi.com	907-279-2511	907-278-2309	Private	N/A	
Other							
AVEC	4831 Eagle Street Anchorage, AK 99583	mbecker@avec.org	907-561-1818	907-562-4086	State	N/A	
TelAlsAKa	P.O. Box 293 Nome, AK 99762	N/A	907-443-5466 1-888-478-3127	907-443-0078	Private	N/A	
GCI Cable	P.O. Box 274 Nome, AK 99762	N/A	907-443-2550 1-800-800-4800	443-5845	Private	N/A	
Shishmaref Native Corporation	P.O. Box 151 Shishmaref, AK 99772	N/A	907-649-3751	907-649-3731	Private	N/A	
Bering Straits Housing Authority	P.O Box 995 Nome, AK 99762	wmundy@bsrha.org	907-443-5256	907-443-2160	Private	N/A	
NOOK.net (Web info source)	P.O. Box 970 Nome, AK 99762	www.nook.net	907-443-7575		Private	N/A	
First National Bank	101 W. 36th Ave. Anchorage, Alaska 99510-07720	N/A	907-777-5663	907-777-3003	Private	N/A	

SHISHMAREF EROSION AND RELOCATION COALITION
P.O. Box 72100
Shishmaref, Alaska 99772

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Association of Alaska Housing Authorities	4300 Boniface Parkway Anchorage, Alaska 99504	N/A	907-338-3970	907-338-4904	Private		
Alaska Airlines	P.O. Box 929 Nome, AK 99762	N/A	907-443-2288	907-443-5520	Private	N/A	
Bering Air	P.O. Box 1650 Nome, AK 99762	N/A	907-443-5464	907-443-5919	Private	N/A	
Cape Symthe	P.O. Box 1856 Nome, AK 99762	N/A	907-443-2414	907-443-2548	Private	N/A	
Hageland Aviation	P.O. Box 1490 Nome, AK 99762	N/A	907-443-7595	907-443-7660	Private	N/A	
Northern Air Cargo	P.O. Box 790 Nome, AK 99762	<u>N/A</u>	907-443-2215	907-443-5052	Private	N/A	
Artic Transportation Services	P.O. Box 790 Nome, AK 99762	N/A	907-443-5482	907-443-4939	Private	N/A	
Lynden Air Cargo	P.O. Box 967 Nome, AK 99762	N/A	907-443-4671	907-443-4672	Private	N/A	