Date: April 3, 2008 Division: POD District: POA

## **SECTION 117 PROJECT FACT SHEET**

# 1. Project.

Section 117 Storm Damage Reduction Project- Newtok, Alaska.

# 2. Location of Project/Congressional District.

The community of Newtok is on the Yukon-Kuskokwim Delta in western Alaska where the Newtok River<sup>1</sup> flows into the Ninglick River. The tidally influenced Ninglick River connects Baird Inlet to the Bering Sea. Newtok is 94 air miles northwest of Bethel and accessible year round by small aircraft. The community, along with most communities in western Alaska, is not linked to a road system. Goods are shipped by air or barge, though barge deliveries have recently been suspended in Newtok. Local transportation is limited to snow machines, all terrain vehicles, and small vessels. Figure 1 is a location/vicinity map for Newtok.

The project area is in the Alaska Congressional District. The Congressional delegation is composed of:

Senator Ted Stevens (R) Senator Lisa Murkowski (R) Representative Don Young (R)

## 3. Study Authority.

The authority for this study is the Fiscal Year 2005 Consolidated Appropriations, Section 117, P.L. 108-447, which reads as follows;

Notwithstanding any other provision of law, the Secretary of the Army is authorized to carry out, at full Federal expense, structural and non-structural projects for storm damage prevention and reduction, coastal erosion, and ice and glacial damage in Alaska, including relocation of affected communities and construction of replacement facilities.

Congressional direction is found on page 41, Senate Report 109-84, for the Energy and Water Development Appropriations Act, 2006, P.L. 109-103.

The Committee has provided \$2,400,000 for Alaska Coastal Erosion. The following communities are eligible recipients of these funds: Kivalina, Newtok, Shishmaref, Koyukuk, Barrow, Kaktovik, Point Hope, Unalakleet, and Bethel. Section 117 of Public Law 108-447 will apply to this project.

\_

 $<sup>^1</sup>$  The local community refers to the river adjacent to the community as the Newtok River. The official name of the river is the Kealavik River. For the purposes of this report the river is referred to as the Newtok River.

# 4. Study Purpose.

The purpose of this study is to evaluate structural and non-structural coastal erosion and storm damage alternatives, including relocation, for Corps of Engineers design and implementation of a Section 117 project at Newtok, Alaska.

# 5. Related Programs, Prior Studies, Reports, and Existing Water Projects.

## a) Related Programs.

**Planning Assistance to States (PAS).** Section 22 of the Water Resources Development Act (WRDA) of 1974 (Public Law 93-251), as amended, provides authority for the Corps of Engineers to assist states, local governments, and other non-federal entities, including Native American Indian tribes, in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. This program was used by the Newtok Traditional Council (a Federally recognized tribe) beginning in 2000 to prepare the first formal reports on relocation. The PAS program has not been used in recent years for studies related to Newtok relocation.

**Tribal Partnership Program.** Since 2004 the Corps has provided limited assistance to the Newtok Traditional Council with relocation planning under the Tribal Partnership Program (Section 203, P.L. 106-541). Baseline studies of the community's preferred relocation site, Mertarvik, include a wetland delineation, fish and wildlife inventories including habitat surveys for two threatened sea ducks, cultural resources studies, social/cultural impact studies, water quality and quantity monitoring, erosion and flood assessments, geotechnical surveys, satellite photo imaging, aerial photography, and topographic mapping. Mertarvik is the Newtok Traditional Council's preferred relocation site. The Tribal Partnership Program will be used in 2007 to perform geotechnical investigations at Mertarvik and to perform a limited number of other studies.

Studies conducted and reports prepared under the above programs, along with those sponsored by the Newtok Traditional Council, other federal agencies and state and local governments, are listed below.

## b) Prior Studies and Reports.

"Comprehensive Community Plan: Newtok on Nelson Island", Newtok Traditional Council, 2005. This Newtok Traditional Council report describes the community's vision, goals and objectives, the community involvement and participation process, and other factors important to the development of a new community at the preferred relocation site.

"Newtok-Background for Relocation Report," January 2004. The Newtok Traditional Council had ASCG, Inc. prepare this milestone report to document the severity of the erosion problem, the planning process the community used over a two-decade long period to address the severe erosion problem, and the community's preferred relocation site and preliminary site development plan. Planning Assistance to States funds were also used to prepare this report.

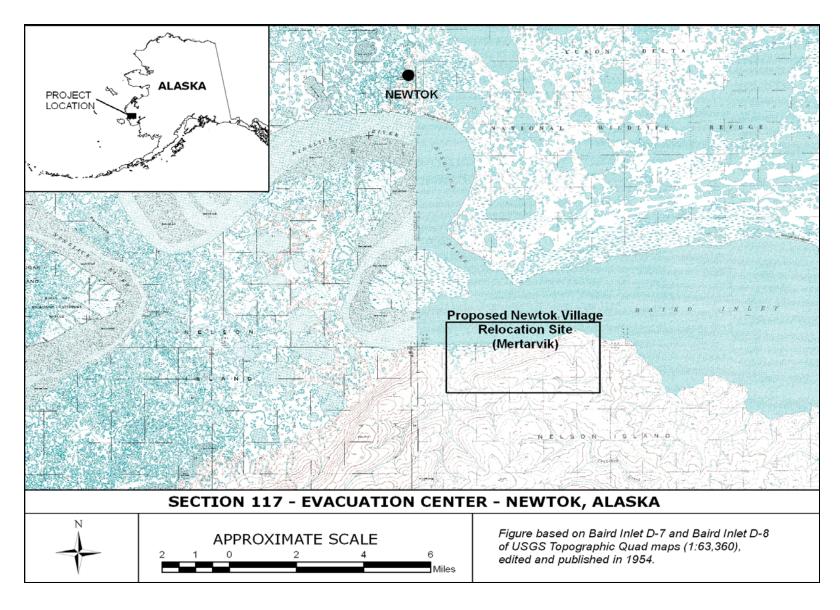


Figure 1. Newtok location and vicinity map.

- "Newtok-Transportation Plan" prepared in December 2001 by ASCG, Inc. for the Newtok Traditional Council and the Bureau of Indian Affairs. The Newtok Traditional Council hired ASCG, Inc. to prepare a report that identifies and describes road needs and priorities for the community's preferred relocation site on Nelson Island. This study was a precursor to the more detailed "Newtok-Background for Relocation Report".
- "Ninglick River Erosion Assessment," February 1984 and Addendum, November 1984 by Woodward-Clyde Consultants. Woodward-Clyde Consultants conducted an assessment of Ninglick River erosion in proximity to the village of Newtok. The purpose of the assessment was to evaluate the causes and rates of erosion at Newtok, as well as to examine potential mitigation of the impact of river advancement on the village. This report found relocation of the community to be the most cost-effective solution to the erosion problems.
- "Preliminary Relocation Planning Analysis-Alaska Villages Erosion Technical Assistance-Newtok, Alaska," February 2006, revised April 2006, Tetra Tech, Inc. for the U.S. Army Corps of Engineers. This report documents state and federal agency workshops in December 2004 and September 2005. The report also presents a preliminary pre-construction listing and timeline for planning and design tasks, assuming no funding constraints and a non-critical timeline.
- "Alaska Villages Erosion Technical Assistance-Newtok, Alaska-Preliminary Costs of Alternatives," April 2005, Tetra Tech, Inc. for the U.S. Army Corps of Engineers. This report presents preliminary costs for the alternatives of relocating the community of Newtok to their preferred relocation site, collocating the community of Newtok with another Nelson Island 'generic' community, and a stay-in-place alternative that includes the costs of a structural erosion control project. Erosion control efforts at Newtok by the state from 1983 to 1989 totaled almost \$1.5 million dollars.
- "Alaska Native Villages-Most Are Affected by Flooding and Erosion, But Few Qualify for Federal Assistance", December 2003, U.S. General Accounting Office (GAO) Report to Congressional Committees. Congress directed GAO to study Alaska Native villages affected by flooding and erosion and to 1) determine the extent to which these villages are affected, 2) identify federal and state flooding and erosion problems, 3) determine the current status of effects to respond to flooding and erosion in nine villages, and 4) identify alternatives that Congress may wish to consider when providing assistance for flooding and erosion. This report identified nine of the most critical villages, and of these, Kivalina, Koyukuk, Newtok and Shishmaref were identified as being in imminent danger from flooding and erosion and are making plans to relocate.
- "Environmental Public Health Assessment: Newtok, Alaska", Troy Ritter, REHS, MPH, DAAS; Mark Stafford, PE, RS; Jennifer Dobson; Suzanne Edelman, BS, MS, September 2006. The executive summary of this report states: "A team of public health professionals representing Alaska's State and Tribal organizations conducted a comprehensive assessment of environmental public health conditions in Newtok, Alaska during the months of August and September 2006. The team found sanitation conditions in Newtok to be grossly inadequate for public health protection. The team's observations, along with the general body of research on

the subject of sanitation and health, and available health statistics from Newtok, suggest that the health of Newtok residents has been compromised by poor sanitation conditions. These conditions appear to result from an initial lack of infrastructure development and failure to properly maintain existing infrastructure. Further negative health consequences are likely if sanitation conditions do not improve dramatically."

# 6. Background Information.

# a) General.

The Newtok Village is a Federally recognized tribe and the Newtok Traditional Council (NTC) is the local governmental entity. The people of Newtok and the neighboring Nelson Island communities of Tununak, Toksook Bay, and Nightmute are known as Qaluyaarmiut (Dip Net People). Place-based traditional knowledge of the land, climate, weather, and subsistence resources has evolved over centuries and subsistence harvesting of fish, meat, and other foods is an important part of their lives.

Newtok is in flat, soggy tundra with many lakes (see Photo 1). In the early 1950's the community relocated to Newtok from dispersed sites farther inland. This site was as far as the Bureau of Indian Affairs (BIA) barge with the new school could navigate and, as with many rural Alaska communities, people moved near the school. Through the 1960's, residents spent summers in fish camps on Nelson Island and winters in Newtok. By the 1970's, snow machines and modern housing replaced dog teams and sod houses. Extreme bank erosion has been a problem since Newtok was established. In 1954, Newtok was 4,000 feet from the Ninglick River. By 2006, the Ninglick River moved to within 800 feet of residences in the community.

# b) Demographics.

Information is from the 2000 U.S. Census unless otherwise noted. In the Nelson Island area, Alaska Natives comprise more than 90 percent of the population. Newtok's population was 95.3 percent Alaska Native (primarily Yup'ik Eskimo) with 85.6 percent speaking a language other than English (likely Yup'ik Eskimo) at home. Residents are fairly young: 20.7 years compared with the statewide average of 32.4 years. The average Newtok household was five people. The Newtok population has remained relatively steady the last 5 years, following 50 years of modest growth (See Table 1). The Alaska Department of Labor and Workforce Development estimated the 2005 population at 315. The Alaska Department of Education and Early Development reports 2005-2006 school enrollment of 122 students in pre-elementary through high school.

Table 1. Newtok Population, 1950-2005

Community 1950 1960 1970 1980 1990 2000 2001 2002 2003 2004 2005 Newtok 69 129 114 131 207 321 326 334 308 315 321 Source: Alaska Department of Labor & Workforce Development

#### c) Infrastructure.

Census 2000 reveals none of the Newtok homes had complete plumbing or kitchen facilities and 21 percent lacked telephone service. Most residents haul water or have water storage tanks, thus they have no shower or washing facilities in their homes. "Honey buckets" (a 5 gallon bucket with a plastic bag liner) can be found in most homes in place of plumbing and sewage disposal. Raw sewage, collected in the honey bucket, is dumped into the Newtok River adjacent to



Photo 1. Newtok, Alaska.

the community. A washeteria, or public laundry facility, is in the community. Lake water is treated and pumped to a storage tank. In winter, melted ice is used when water in the storage tank runs dry or freezes. Refuse is collected and hauled to a landfill across the Newtok River. The health clinic uses flush/haul tanks and the school (Ayaprun School) has individual wells. Electricity is provided by Ungusraq Power Company. Newtok is classified as an isolated village and is found in EMS Region 7A in the Yukon-Kuskokwim Region. Emergency medical services have coastal and air access and medical care is provided by a health aid at the Newtok Health Clinic.

## d) Employment.

The school, health clinic, village services, and commercial fishing provide employment. Work for wages is supplemented by transfer payments (e.g. social security, public assistance, and retirement income). Subsistence activities and trapping supplement cash income. Alaska Department of Fish and Game Commercial Fisheries Entry Commission 2004 data show 13 of 20 permit holders in Newtok landed 180,945 pounds of fish in the halibut, herring, and salmon fisheries with estimated gross earnings of \$73,485. In addition to 20 permit holders in Newtok, there were 12 licensed crew members in 2004. Census data show an unemployment rate of 15.6 percent, which belies the true employment picture since 36.5 percent of the eligible working population is considered not in the workforce. Median annual household income was \$32,188 compared with the statewide average of \$51,571. Annual per capita income was \$9,514 and 29.8 percent of the population was living below the poverty level.

## e) Climate and Topography.

Newtok is in a transitional climatic zone, with characteristics of both maritime and continental climates, strongly influenced by storms to the south and southwest in the Bering Sea and weather of interior areas near Bethel, Alaska. The closest recorded climatic data station is at Hooper Bay, 55 miles to the northwest. Hooper Bay data indicates daily maximum temperatures range

from 56 to 60 degrees Fahrenheit (°F) in the summer and 18 to 19 °F in the winter. Daily minimums range from 2 to 5 °F in the winter and 42 to 47 °F in the summer. Record temperatures are a high of 80 to low of –35 °F.

Newtok averages 17 inches of precipitation a year, with most of it falling as rain during July and August. Snowfall occurs from November to March with 28 inches average accumulation. Rivers and lakes usually freeze in November with ice thickness on the Ninglick River of 6 to 8 feet. Sea-ice begins to freeze in late November and melts out in May. The last safe date to be on the river and lake ice is reported to be early May.

## f) Winds.

Prevailing winds for the area are from the south to southwest during July and August, becoming predominantly north by northwest from September to June. Newtok residents indicate the strongest winds are from the south, with the extreme winds every 10 to 20 years directly from the east. Newtok wind design data lists a 25-year wind at 100 miles per hour.

# g) Tides.

There are no tide stations in Newtok or most of western Alaska. Local residents report the tides generally have a range of 3 to 5 feet. Woodward-Clyde Consultants measured tidal elevations in the summer of 1983 and determined a tide range of 5.5 feet.

# h) Storm Surges.

Powerful fall storms in the Bering Sea produce high winds combined with wind—driven storm surges resulting in severe and widespread coastal flooding along the western coast of Alaska. Storm-induced surges can produce short-term increases in water level resulting in water elevations considerably above expected tidal elevations. It is estimated that storm surge can raise tide levels 10 to 15 feet above normal.

## i) Geology.

Newtok is in low-lying treeless tundra underlain by shallow continuous permafrost. Typical soil is deep frozen silty material layered with peat near the surface. Ice-rich permafrost begins in the upper two feet of soil extending to 600 feet in some areas. Degrading permafrost can be seen on the banks of the Ninglick River (see Photo 2). These soils remain saturated with water and have very low load bearing capacity. Drainage is poor due to the shallow permafrost layer.

## 7. Plan Formulation.

# a) Identified Problems.

General. Newtok is threatened by severe erosion and storm surge flooding. Problems endemic to many rural Alaska communities, such as a lack of adequate drinking water and sanitary sewage disposal, have been worsened by the erosion and flooding. Most state and federal programs are set up to allocate scarce resources under normal or emergency circumstances. The problems at Newtok do not fall within the pre-established funding and priority-setting processes of most agencies because an emergency has not been declared. Failure of community attempts to secure assistance to deal with these problems in a timely manner highlight institutional constraints at the state and Federal levels. Many of the problems identified in Newtok reflect those expressed in the September 2000 Pacific Ocean Division Listening Session in



Photo 2. Degrading permafrost on the banks of the Ninglick River.

Anchorage, Alaska. The following conditions reported in this Listening Session exist in Newtok: 1) lack of sanitary water and sewage disposal, 2) fragmented planning and development of infrastructure projects, and, 3) lack of local planning capability.

**Erosion.** The Ninglick River has been eroding and moving in the direction of Newtok for decades. Figure 2 illustrates historical and projected erosion. The long-term average erosion rate near Newtok from 1957 to 2005 is estimated at 72 feet per year. Newtok residents indicate up to 300 feet of bank have been lost in one storm event. There are no geologic or channel geometry limitations evident that will slow down or stop the erosion before it reaches Newtok. The erosion took the community's landfill in 1996 and the barge landing in 2005. Community structures will fall to erosion in as little as 10 years if no action is taken.

In 1996 the Ninglick River captured a bend on the smaller Newtok River triggering a series of hydrological changes: 1) flows from the Newtok River watershed east of the captured bend are no longer added to the remnant Newtok River channel (remnant slough) adjacent to the village and it is filling in with sediment; and, 2) a direct hydrological connection, via the remnant Newtok channel, was made from the Ninglick River to the community.

Barge navigation on the Newtok River remnant slough has become difficult and in April 2006 a fuel barge was grounded for 3 days (See Photo 3). The barge company has informed the community that they will suspend future fuel barge deliveries. Fall 2006 fuel deliveries were not

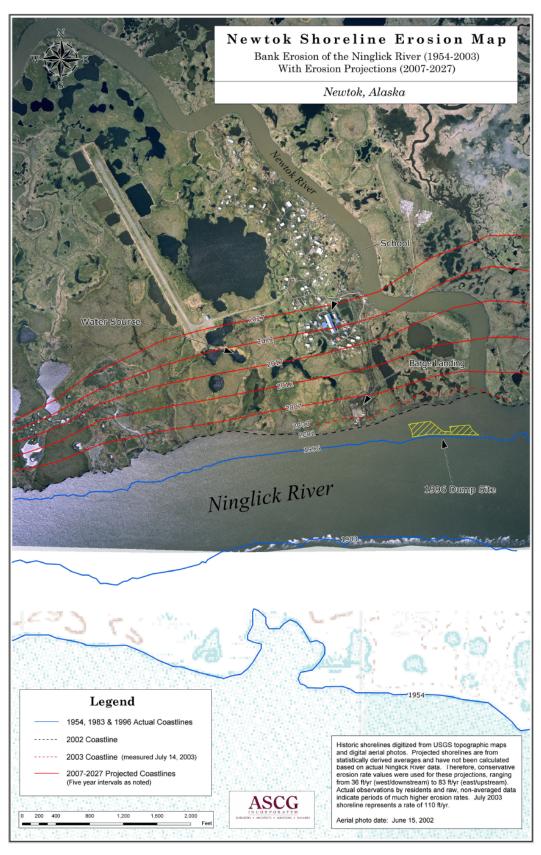


Figure 2. Ninglick River historical and projected erosion at Newtok Alaska.

made. The community is experiencing a fuel crisis.

The replacement community landfill is across the Newtok River and small boat waste hauling is now limited to high tide. Solid waste stacks up on the Newtok side of the channel waiting until high tide for hauling to the landfill (See Photo 4).





Photo 3. Barge stuck in Newtok River. Photo 4.

Photo 4. Trash boat waiting for high tide.

**Flooding.** Powerful fall storms in the Bering Sea produce high winds combined with wind—driven storm surges resulting in severe and widespread coastal flooding along the western coast of Alaska. In the past, the community was insulated from these storms by the landform between them and the Ninglick River. The recent cut-off of the Newtok River by the Ninglick River has made a direct hydrological connection between the Ninglick River and the community of Newtok. Wave action and storm surge can now directly impact the community. Bering Sea storms in recent years resulted in State of Alaska Declarations of Disaster Emergencies (October 2004 and September 2005) which included Newtok.

The September 2005 flood waters were at the floor level of the lowest houses in the community damaging three residences. Figure 3 shows the September 2005 Newtok flood area. Newtok also flooded in the February 2006 storms. Table 2 indicates the number of residences that are likely to be flooded in floods with varying probabilities of occurrence. There are 67 residences in Newtok.

Table 2-Newtok Residences Flooded in Various Flood Events

Chance of Occurrence in any	Chance of occurrence in a 10-	Number of residences flooded
year (%)	year period (%)	
5	40	9
2	18	25
1	8	41

Also note in Figure 3 that the boardwalk from the community to the airport is flooded, impacting evacuation or emergency supply by air. Besides damaging houses, flood waters impact the community by: 1) flooding the water supply and interrupting the filling of the water storage tank in the fall, 2) potentially contaminating ice residents melt for drinking and bathing, and 3) spreading raw sewage throughout the community.

As a result, residents are subjected to increased health risks, for example, when protecting and securing property during flood events (See Photo 5).



Photo 5. Newtok residents working in flooded subsistence fish drying areas to secure property.

Communications. Communications with remote communities such as Newtok are often not possible during and following storms. This is accepted as the norm by many agencies, including the Department of Military & Veterans Affairs- Division of Homeland Security and Emergency Services. Contact with the state emergency services (Department of Military and Veterans Affairs Division of Homeland Security and Emergency Management) is by; 1) phone or email during working hours, and 2) the emergency services 24-hour telephone line after working hours and on weekends. The February 2006 storm hit Newtok on a 3-day weekend after working hours. The telephone system caught on fire and for a number of days communications were limited to a few e-mail accounts. Newtok was finally able to communicate with state emergency services by relaying email messages through contacts elsewhere in the state who called the 24-hour telephone line.

Water Supplies. Fresh water sources are extremely limited at the existing community of Newtok due to salt water intrusion. Under existing conditions fresh water is pumped from the top layer of a shallow tundra pond near the airport to a treatment facility and 220,000-gallon storage tank. The last filling of the storage tank in fall must last through the winter. Early fall storms in 2005 prevented final filling of the storage tank before the water supply froze for the winter. Early January 2006 the last stored water was used. The treated water is available to residents at a common pumping site and the washeteria in the summer and fall. The washeteria is closed in the winter to conserve stored water. Residents also supplement water supplies with rainwater and by melting ice.

**Sewage Facilities.** Newtok does not have a sanitary sewage disposal system. Human waste from the community is dumped directly into the Newtok River remnant slough adjacent to the community. Most of the waste is transferred from houses to the Newtok River using 5-gallon plastic buckets. The clinic and a few residences in Newtok have flush/haul systems for sewage.

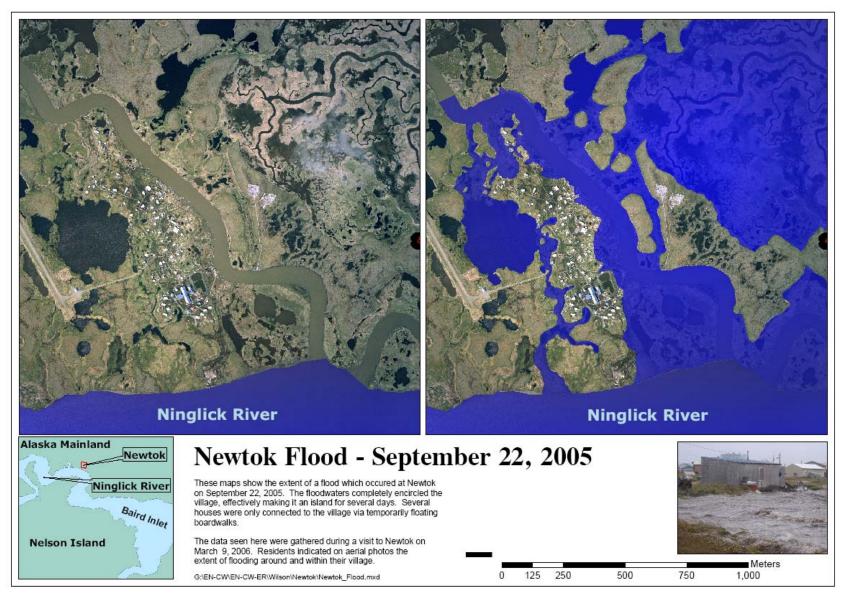


Figure 3. Newtok Flood—September 22, 2005.

For these, an ATV with a vacuum pump transfers waste to the river. The school sewage goes to a sewage lagoon between the school and the Newtok River. This sewage lagoon leaks into an area used by residents to dry subsistence fish and that is subject to flooding (See Photo 6).



Photo 6. Leaking sewage lagoon next to school and subsistence fish drying areas.

**Local Resources.** The resources of Newtok are appropriate to the needs of the community under normal conditions. Under stressed conditions, such as those caused by Ninglick River erosion and flood events, community resources are put under tremendous pressure. The Newtok Traditional Council has limited administrative and technical staff to work with dozens of state and federal agencies and at the same time attempt to maintain services under emergency situations. A Volunteer Newtok Traditional Council Relocation Liaison serves as the agency point of contact. Each agency has its own culture and sets of acronyms, language, policies, and requirements which the liaison translates for the Yup'ik speaking leaders of Newtok.

Many state and federal programs are competitive and geared towards communities with professional grant writing capability. The State of Alaska Department of Community Advocacy recently provided professional staff to write applications for state and federal assistance on behalf of the Newtok Traditional Council to partially mitigate for the lack of grant writing capability within the community.

Technical resources and powered equipment are limited. For example, Newtok does not have software such as the Geographic Information Systems (GIS) that is being used by other agencies. Motorized equipment is limited to All Terrain Vehicles (ATV's). Moving a structure, for example, is difficult with only ATV's and manual labor.

**Infrastructure.** Much of the existing infrastructure in Newtok is beyond its useful life. For example, the fuel tanks have leaks at joints and valves, failing foundations, inadequate liner and

dike systems, and are subject to flooding. There does not appear to be a feasible means of protecting new capital investments from flooding and erosion, so such investments have been deferred by the State of Alaska in accordance with their Administrative Orders No. 175 and No. 224.

**Transportation.** Access to Newtok is by either small aircraft or small boats. Newtok is not on any road network to other communities and structures are connected with wood boardwalks that can float during floods. All terrain vehicles (ATV's) and boats are used for local transportation. The barge landing was eroded in 2005. Snow machines are used in the winter, if conditions allow, for travel to nearby communities.

## b) Alternative Plans Considered.

**General.** The erosion problem at Newtok has been evident for decades, and alternatives to address this problem have been developed over a similar time period. Structural alternatives, such as bank stabilization, were looked at early on. Bank stabilization efforts to date have not been successful. Non-structural alternatives, namely relocating the community, have been considered and analyzed for the last two decades. The NTC evaluated six sites for relocating Newtok and its residents, in survey polls in September 25, 1996 and May 22, 2001, preferred relocating to Mertarvik on Nelson Island. Mertarvik has several advantages over other sites including it's out of danger from flooding, erosion, and thawing permafrost. In August 27, 2003 the NTC conducted a final poll in order to reconfirm and officially document resident views on village relocation. There was a 94% voter turnout with 92% for relocating to Mertarvik. Other locations on Nelson Island received 3% and other solutions combined were 5%. There were no votes for collocating Newtok with one of the other area communities. Congress authorized a land exchange between the Newtok Village Corporation and the U.S. Fish and Wildlife Service in 2003, under the Alaskan Native Village and the Interior Department Land Exchange Act of November 17, 2003, Public Law 108-129, 117 Stat. 1358. The Department of Interior conveyed 10,943 acres at the Mertarvik site to the Newtok Village Corporation on April 28, 2004. See Figure 1 for Mertarvik location.

Alternative 1--No Action. Without state or federal action, the community of Newtok has begun to move themselves. The community has built a temporary timber barge landing. Three homes, in containerized packages, were delivered to Mertarvik in the fall of 2006. Given the extremely limited resources of the community, this alternative will be fraught with hardship and take many years. During the relocation, community cohesion will be disrupted and scarce community resources will be expended in maintaining two town-sites. New infrastructure on Mertarvik will take much longer to build and may need upgrading by the time a move is completed. Maintaining and operating the decaying infrastructure in the existing Newtok site will use scarce resources that would be better used on the new town site.

The cost for community services will be greater for two locations, for example operating two power plants. Accommodations for school children will take significant resources as schools will have to operate in Mertarvik and existing Newtok. Or dependable transportation will have to be developed to transport school children across nine miles of water on the Ninglick River.

Clean up of abandoned facilities will be deferred as scarce funding will necessarily go to

facilities in the new town site. Abandoned facilities constitute hazards to health and safety to Newtok residents waiting for homes in the new town site.

State of Alaska Administrative Order No. 224 states: "Needs of existing communities have priority. Priority will be given to the infrastructure needs of existing communities before consideration of proposals to create new communities, unless there is a congressionally directed relocation of an existing community." Public Law 108-129 dated Nov. 17, 2003 authorized a land exchange between the Newtok Native Corporation and the Department of Interior. However Public Law 108-129 does not direct the relocation of any existing community. Therefore it is unlikely facilities for relocating Newtok will have any priority in State of Alaska funding requests.

With no Federal and state action, relocation efforts will be piecemeal and uncoordinated and will increase ultimate costs many times over a coordinated, efficient relocation plan. Local efforts will take many years and the existing significant risk to health, life, and property will continue in Newtok. The disintegration of these people as a distinct tribe may result from splitting the community in two or more locations for many years as they relocate under their own efforts.

**Alternative 2--Stay-in-Place.** This alternative assumes construction of features to provide ongoing and long term protection for community infrastructure and upgrading/replacement of failing infrastructure to acceptable levels. Acceptable levels are defined as equivalent to infrastructure the community would have under a relocation alternative. For example fuel storage facilities would be upgraded or replaced as necessary.

Construction is assumed to be accomplished by Corps of Engineers for erosion protection and flood damage reduction measures. Other construction measures such as fuel storage and utilities are assumed to be accomplished by other organizations/agencies.

The causes of erosion appear to be wave action and thermal degradation of the ice rich riverbank along with tidal currents. Observations made by Woodward-Clyde indicate the erosion process is initiated by exposure of ice-rich soils in the riverbank to the relatively warm river water and sun. Very little site-specific data is available to design a structural fix to the erosion problem. A revetment would need to be placed along a mile of shoreline to protect the community (Figure 4).

The revetment would not contribute to any solutions for flood (storm surge) damage reduction measures. Reasonable flood (storm surge) damage reduction measures the Corps could provide for Newtok appear to consist of:

- 1. Flood proofing structures;
- 2. Raising the elevation of the boardwalk between the village; and,
- 3. Building and stocking an evacuation center for flood evacuees.

Conditions at the existing village site are deteriorating due to river bank erosion, failing water sources, increased flooding, decreasing sanitation, health, and quality of life conditions. The community of Newtok has already begun to move themselves to a new village site acquired by the Newtok Village Corporation in 2004 (See paragraph "General" and the No-Action

Alternative). A Newtok Planning Group composed of Newtok, state, and Federal agencies started in 2006. The Newtok Planning Group is actively working on site plans and identifying project and funding responsibilities for relocating Newtok. There are no local, state, or Federal priorities to permanently replace and upgrade facilities/infrastructure at the existing failing village site. Therefore the Stay-in-Place Alternative is no longer considered.

**Alternative 3--Collocation.** Schweitzer and Marino (2005) examined the cultural impacts of collocation of Shishmaref, Alaska, to either Nome or Kotzebue. Their conclusions can be applied more broadly throughout the circumpolar North. The research indicates that many aspects of culture (e.g. language, dancing, festivals, carving and sewing, and cultural values), as well as subsistence practices and lifestyles, would be adversely affected in some way by collocation. Members of the collocating community generally maintain spatial, social, and cultural segregation from the surrounding community in an attempt to maintain their identity. This results in retention of a group identity for at least a few generations, but can cause social tension and eventually the collocating group assimilates into the surrounding community. Most importantly, the study concluded, if a community is unwilling or unenthusiastic about collocating, then that move must be considered forced. "Historical cases show that this scenario of 'forced relocation' would have dramatic negative cultural, economic, health, and social impacts..." (Schweitzer and Marino 2005:146). Schweitzer, Peter P., PhD and Elizabeth Marino. 2005. Coastal Erosion Protection and Community Relocation: Shishmaref, Alaska, Collocation Cultural Impact Assessment, University of Alaska Fairbanks, prepared for U.S. Army Corps of Engineers, Alaska District.

The least disruptive to the Newtok community identity and lifestyle would be collocation with Nelson Island Communities. The people of Newtok share a heritage with the other Nelson Island communities of Nightmute, Tununak, and Toksook Bay. Their ancestors have lived on the Bering Sea coast for at least 2,000 years. However, problems and concerns the people of Newtok have with collocation include:

- The increased population would result in a lack of housing, overcrowded schools, stress on utilities and other infrastructure, high unemployment, and strain on local subsistence.
- Although there are strong bonds between communities, the unique Newtok tribe would be lost. They want to stay a separate, closely knit community.

Collocation would destroy the Newtok community identity. The community of Newtok has already begun to move themselves to a new village site acquired in 2004 through Public Law 108-128 (See paragraph "General" and the No-Action Alternative). For these reasons, the Collocation Alternative is no longer considered.

Alternative 4--100% Corps Relocation. The 100% Corps relocation alternative would consist of the Corps of Engineers taking the lead role in relocating Newtok from the existing community site to a new community site. This would encompass obtaining all funding, designing & building new facilities or relocating usable existing facilities to Mertarvik and collaborating with the NTC, residents, and the various state and federal agencies. Also the Corps of Engineers would accomplish demolition and closeout of the existing location. Since Newtok has already made the decision to move (See No-Action) and several state and federal agencies are already

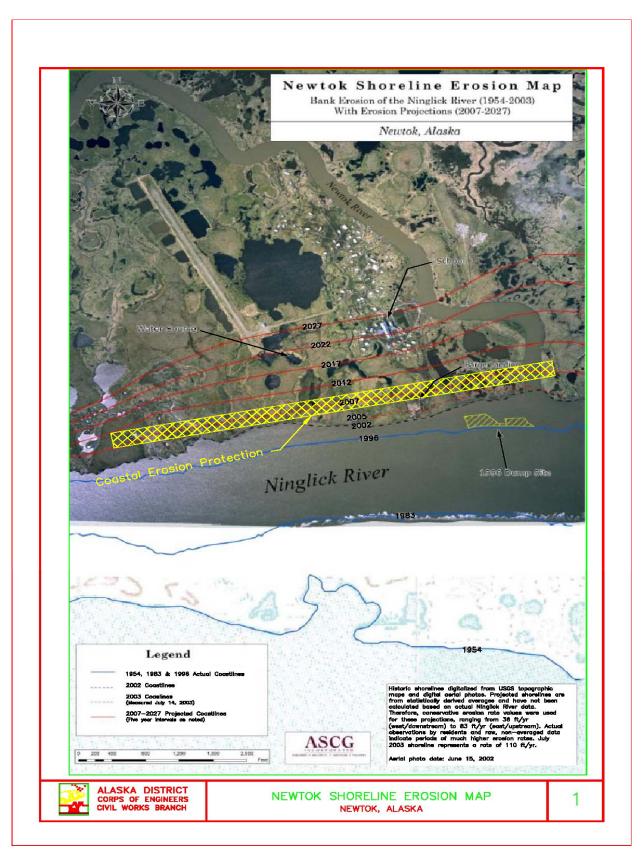


Figure 4. Potential revetment configuration at Newtok.

planning their participation in relocation through the Newtok Planning Group, the 100% Corps Relocation Alternative is no longer considered.

Alternative 5--Collaborative Relocation. The collaborative relocation alternative consists of cooperative efforts on the part of many entities to accomplish relocating Newtok from the existing community site to Mertarvik. The NTC will have the lead in coordinating relocation efforts of the various entities that would provide funding, studies, engineering and design, and construction. The NTC will also have final approval of designs and facilities location at Mertarvik. The Corps of Engineers, under the collaborative relocation alternative, would undertake relocation tasks the other state and federal agencies may not be able to accomplish under their authorities and funding mechanisms or those that fit with Corps of Engineers expertise. These tasks may include studies, engineering and design, and construction. The Corps of Engineers authority for undertaking relocation efforts is P.L. 108-447, SEC. 117 (see Section 3 Study Authority). Because the community of Newtok has already decided to move, are making efforts in moving to Mertarvik and several state and Federal entities are planning their participation in the move through the Newtok Planning Group, the collaborative relocation alternative is considered the most likely without-project condition.

Mertarvik is the name and location for the proposed relocation of Newtok. Currently there are no facilities with the exception of 3 houses constructed in late 2006/early 2007 by NTC. The materials for these homes were carried by hand and All Terrain Vehicle (ATV) from a marine landing craft to a building site near shore. See Photos 7 & 8.



Photo 7. Barge delivering house material.

Photo 8. Offloading barge by hand.

The Alaska Department of Commerce, Community, and Economic Development (DCCED)-Division of Community Advocacy was directed by Alaska Administrative Order No. 231, dated 29 Nov 2006, to ".... Act as the state coordinating agency to coordinate with other state and federal agencies to propose long-term solutions to the ongoing erosion issues in the City of Kivalina and other affected coastal communities in this state." Division of Community Advocacy has taken an active role in organizing the Newtok Planning Group since the spring of 2006. The Newtok Planning Group is meeting and working on relocation plans. Table 3 lists organizations that are presently most active within the Newtok Planning Group. Participation within the Newtok Planning Group is expected to vary as agencies' roles in assisting with Newtok relocation varies. Organizations are seeking to integrate plans for strategic implementation of village relocation planning while working within their usual missions and programs.

Table 3 Newtok Planning Group

Organization	Organization To	A
Organization The North Control of the Control of th	Organization Type	Acronym
Newtok Traditional Council	Federally recognized tribe government	NTC
Newtok Native Corporation	Village corporation	
Calista Regional Native Corporation	Alaska Native Regional	
Cansta Regional Native Corporation	Corporation	
U.S. Department of Commerce-Economic	Federal	EDA
Development Administration	1 ederar	LDI
U.S. Army Corps of Engineers	Federal	COE
Denali Commission	Federal/State of Alaska	COL
Department of Commerce, Community &	State of Alaska	DCA
Economic Development-Division of Community	State of Thuska	Den
Advocacy		
Alaska Department of Transportation & Public	State of Alaska	ADOT&PF-
Facilities-Ports & Harbors		Ports &
		Harbors
Federal Aviation Administration	Federal	FAA
Alaska Department of Transportation & Public	State of Alaska	ADOT&PF-
Facilities-Airports:		Airports
Alaska Energy Authority	Public Corporation of State of	AEA
	Alaska	
Alaska Department of Environmental Conservation,	State of Alaska	VSW
Division of Water, Village Safe Water Program		
Housing and Urban Development	Federal	HUD
Rural Alaska Community Action Program, Inc.	Non-Profit	RuralCAP
Association of Village Council Presidents-Housing	Regional Housing Authority	AVCP
U.S. Department of Agriculture, Rural	Federal	
Development		
Lower Kuskokwim School District		LKSD
Alaska Army National Guard	State of Alaska	
Yukon–Kuskokwim Health Corporation		YKHC
US Fish and Wildlife Service	Federal	USFWS
Alaska Department of Natural Resources, Office of	State of Alaska	
History and Archaeology		
Department of Military and Veterans Affairs-	State of Alaska	
Alaska Division of Homeland Security and		
Emergency Management		
Coastal Village Region Fund	Non-Profit	CVRF
U.S. Department of Agriculture-Natural Resources	Federal	NRCS
Conservation Service		

The Corps is working collaboratively with the Newtok Planning Group to identify features that are not within the usual jurisdiction of other agencies or where there is agreement other agencies could not perform in a timely manner. Opportunities are also being identified for the Corps of Engineers to act as the design, contracting, and/or construction agent for others through cooperative agreements and existing authorities such as International and Interagency Support (IIS) on a reimbursable basis. These decisions would be made on a case-by-case basis in collaboration with others in the Newtok Planning Group.

Alaska Department of Transportation & Public Facilities-Airports planning for the Mertarvik site is well underway, with four alternative sites identified in a reconnaissance report and field investigation being conducted and planned for this year. Preliminary site and community plans have been approved by village residents and the NTC. (See Figure 5) However, these are concepts and plan details will change as coordination and design develops.

While integrated plans for strategic implementation of village relocation are being developed, focus has been given to near-term needs. Within the framework of the Newtok Planning Group, the Division of Community Advocacy was awarded a U.S. Department of Commerce-Economic Development Administration grant on behalf of the NTC in October 2006 to build a Multi-Use Marine Support facility at Mertarvik. The multi-use marine support facility will include a barge ramp, staging area, removable float system, and a fisheries support center. Construction is expected to begin in 2008.

## c) Recommended Plan.

Newtok has a need for replacement facilities to house people on a short-term basis when storm surge flooding and river erosion are impacting houses and public facilities. This would be needed during storm events and while facilities are being cleaned and repaired. The Corps of Engineers proposes to provide an evacuation center in a safe location compatible with ongoing relocation plans for Newtok.

The evacuation center would be located on Mertarvik. The shelter would be self sufficient with regards to power, water, sewage disposal, and solid waste disposal. With the combination of deferred investment in infrastructure at the existing community of Newtok and impacts that have occurred and are expected to occur with coastal storms, power, water, sewage disposal, and solid waste disposal at the existing community of Newtok have been severely compromised. As stated in the "Environmental Public Health Assessment: Newtok, Alaska" the "[s]anitation conditions in Newtok are grossly inadequate for public health protection." These inadequacies will be compounded during coastal storm events. Opportunities for replacing these lost or compromised components of the community are hindered by the rapidly deteriorating physical conditions at the site and by public investment policies that preclude investments of new infrastructure at Newtok because it is subject to flooding and erosion.

At the existing community water is drawn from a tundra pond and stored part of the year and residents travel to more distant ponds when this supply runs out. The primary tundra pond will be lost to erosion by 2016 or 2012, given an average and maximum erosion rate, respectively. The more distant ponds are likely contaminated during coastal storm flooding. The school is the only reasonable shelter in the community now and the capacity of its well is limited by saline intrusion. The school will be lost to erosion shortly after the community's primary tundra pond is lost. Water quality and quantity information from Mertarvik, which in Yupik means "getting water at the spring water", points to the potential for good water quality and quantity at Mertarvik. At this time Village Safe Water (VSW) proposes to develop a water source that would be compatible with the shelter and future Newtok relocation. Investment at the existing site is precluded.

The proposed shelter would consist of a building, generator, water supply, sewage lagoon, and

road from the proposed multi-use marine support center at the shore of the Ninglick River. The shelter would be sized to provide temporary housing for 100 people with movable dividers in one large space. Permanent spaces are the support areas including kitchen, latrine/shower rooms, storage area, first aid room, and communications and office areas. The storage area will have space for food, water, cots, blankets, and miscellaneous items needed for an evacuation center. Detail design will be similar to the design noted in "Design Analysis, Emergency Shelter, Shishmaref, Alaska" dated October 2004 prepared by U.S. Army Corps of Engineers, Alaska District. Estimated space requirement is shown in Table 4 and estimated cost in Table 5. Cost estimates are based on parametric estimates for the "Design Analysis, Emergency Shelter-Shishmaref, Alaska" and escalated to the October 2007 price level.

Table 4. Space Require	ment (SF)	Table 5. Estimated Cost	(\$000's)	
Main Space	5,400	Mob/Demob	3,500	
Kitchen .	300	Building	7,377	
Toilets and Shower Facility	ties 775	Access Road	1,500	
Food/Water Storage	235	Water Supply	426	
Miscellaneous Storage	130	Wastewater Treatment	840	
Office/Communications	170	Powerplant	100	
First Aid Station	80	Site Improvements	495	
Arctic Entry/Circulation	385	Utilities	494	
Janitorial	20			
Mechanical	250	LERRD	30	
Electrical/Communications <u>50</u>		Planning Engineering and De	Planning Engineering and Design 900	
Total Facility Area	7,795	Construction Management	1,000	
		20% Contingency	3,332	
		Total (use 20,000)	19,994	

When not being used for emergency and temporary housing, the evacuation center may be reconfigured for NTC offices and community facilities and other such purposes as designated by NTC. The NTC will be responsible for all operations and maintenance costs for the evacuation center. The NTC has approved a location in the center of the proposed community at Mertarvik as the site for the evacuation center.

This alternative does not address the immediate needs of the community for an emergency potable water supply, protecting structures from flooding, and emergency communications systems. These needs still need to be coordinated with NTC and the Newtok Planning Group. They may be addressed under a separate Section 117 recommendation or other Corps program.

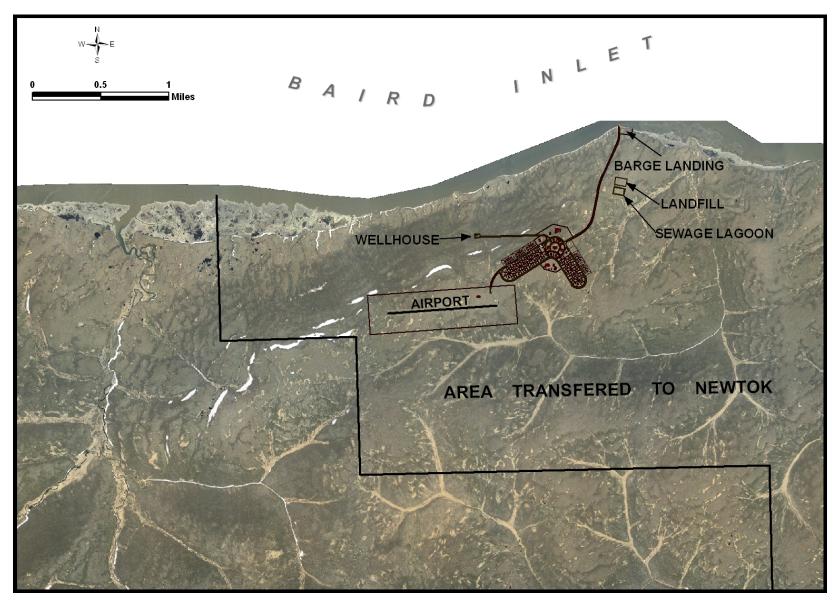


Figure 5. Concept Mertarvik Community Plan.

# 8. Views of Sponsor.

The Newtok Traditional Council is actively engaged in relocation efforts. Attachment A includes a letter from the Newtok Traditional Council dated June 11, 2007. This letter describes how the Newtok Traditional Council intends to cooperate with the Corps for design and construction of the recommended plan.

# 9. Views of Federal, State, and Regional Agencies.

The recommended plan was developed in collaboration with the Newtok Planning Group. A letter of support from the Alaska Department of Commerce, Community, and Economic Development-Division of Community Advocacy is included in Attachment A.

## 10. Status of Environmental Statutes Compliance.

Environmental baseline studies were conducted in order to assist the planning effort and to accelerate data collection and scoping needed for documenting impacts under the National Environmental Policy Act that would be required for an authorized Federal action. The collected environmental data has been made available to cooperating agencies. A survey was conducted by the U.S. Fish and Wildlife Service for the presence of nesting habitat for Spectacled and Steller's eiders, threatened sea ducks in the Takikchak marsh. The results indicated the marsh is unsuitable nesting habitat. A Cultural Resources survey was conducted. Several sites were noted but development in much of the Mertarvik town site would not have a significant effect to cultural resources. Further coordination with the State Historic Preservation Office will be conducted during the design phase based on specific project features. A wetland delineation report and Geographic Information System (GIS) mapping was accomplished to assist in wetland permitting under Section 404 of the Clean Water Act and community and infrastructure planning.

The approved Federal Action would require an evaluation under the National Environmental Policy Act which would include an evaluation of alternatives for consideration. During the scoping process it would be determined, in collaboration with participating agencies, the methodologies and types of data and level of detail required in the analysis of each alternative for the project. A 404 (b)(1) evaluation under the Clean Water Act on the discharge of fill in wetlands would be a large component of the analysis. Further coordination is required under the Fish and Wildlife Coordination Act and the Endangered Species Act.

Development of an evacuation shelter and associated structures at Mertarvik would have minor effects on nearby acreages of wetlands and associated wildlife habitat. Regionally large tracts of similar wetlands and wildlife habitats exist. Wildlife populations would not be affected Fish and fish habitat would not be affected. The project would not impact cultural sites.

Under the existing conditions in Newtok there is a significant risk to life and health, especially for children and elders, who are most susceptible to the risks associated with the lack of safe water and sewage disposal. It is significant to the human environment that deferred upgrades of crumbling facilities are occurring because of the anticipated village relocation. Relocation would have some significant social/cultural impacts to the community as well.

# 11. Implementation Schedule.

PED including completion of NEPA documents

PCA

Contract Award\*

Construction Complete\*

\*Subject to availability of funding

FY 2008

Oct. 2008

2<sup>nd</sup> Qtr FY 2009

FY 2010

# 12. Supplemental Information.

## a. Headquarters Guidance.

The VTC Fact Sheet dated 12 December 2005 contained the following instructions for implementing projects under the aforementioned legislation.

The Alaska Coastal Erosion Section 117 Program will follow the processes, procedures, and regulations for the Continuing Authorities Program, Section 14, Emergency Streambank and Shore Protection and any changes issued thereto, with the following exceptions.

- 1. Funding. Funding is 100 percent Federal.
- 2. Federal Limit. There is no statutory Federal cost limit.
- 3. PCA. A new model Project Cooperation Agreement is required and will be developed and submitted to ASA (CW) for approval.
- 4. No Limit. There is no limit on facilities eligible for protection.
- 5. Types of Projects. All types of projects authorized by Section 117 may be implemented.

#### 13. Recommendations.

The Newtok Traditional Council has indicated willingness to sign a project partnership agreement for the recommended project (*Project*) and understands the non-Federal sponsor responsibilities for this *Project*, including providing required lands, easements, and rights-of-way and the requirement to maintain and operate the *Project* after construction.

I recommend an emergency shelter be provided at Mertarvik, Alaska generally in accordance with the recommended plan herein, and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, provided that prior to construction the non-Federal sponsor agrees to the following:

## a) Cost Sharing.

All costs for design/construction of the *Project* carried out pursuant to Section 117 will be at full Federal expense, except as discussed in the following paragraphs. Each party will be solely responsible for its costs of participation in the Project Coordination Team.

# b) Lands, Easements, and Rights-of-Way.

After consultation with the Newtok Traditional Council, the Federal Government shall determine the lands, easements, and rights-of-way required for construction, operation, and maintenance of the *Project*, including those required for *relocations*, the borrowing of material, and the disposal of

dredged or excavated material. The Federal Government in a timely manner shall provide the Newtok Traditional Council with general written descriptions, including maps as appropriate, of such required lands, easements, and rights-of-way.

The local sponsor shall provide, at no cost to the Federal Government, all lands, easements, and rights-of-way, including those required for *relocations*, the borrowing of material, and the disposal of dredged or excavated material, that the Federal Government determines the Newtok Traditional Council owns or controls on the effective date of the Project Partnership Agreement and which the Federal Government determines are required for the construction, operation, and maintenance of the *Project*. This project would be constructed with 100 percent federal funds and no credit would be given the sponsor for providing lands, easements, and rights-of-way.

All other LERRD requirements will be performed by the Government at full Federal expense. Title of any lands, easements, and rights-of-way acquired by the Government will be in the name of the local sponsor.

The local sponsor shall prevent obstructions or encroachments on the *Project* (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on *Project* lands, easements, and rights-of-way or the addition of facilities which might reduce the level of protection the *Project* affords, hinder operation and maintenance of the *Project*, or interfere with the *Project's* proper function;

Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the Newtok Traditional Council owns or controls for access if required by the Federal Government for the purpose of inspection and, if necessary, for the purpose of completing, operating, maintaining, repairing, rehabilitating, or replacing the *Project*; and,

Ensure that all lands, easements, and rights-of-way that the Federal Government determines to be required for the *Project* are retained in public ownership for uses compatible with the authorized purposes of the *Project*.

# c) Operation, Maintenance, Repair, Rehabilitation, and Replacement (OMRR&R).

The Newtok Traditional Council shall operate, maintain, repair, rehabilitate, and replace the entire *Project* or *functional portion of the Project*, at no cost to the Federal Government. All agreements for design/construction will state that, as between the Government and the local sponsor, the Government will have no responsibility for the OMRR&R of the project. The Newtok Traditional Council shall conduct operation, maintenance, repair, rehabilitation, and replacement responsibilities in a manner compatible with the *Project's* purposes and in accordance with applicable Federal and State laws and as prescribed by the Federal Government.

#### d) Hold and Save.

The local sponsor shall hold and save the United States free from all damages arising from design, construction, operation, maintenance, repair, rehabilitation, and replacement of the *Project* and any *betterments*, except for damages due to the fault or negligence of the United States or its contractors.

# e) Federal and State Laws.

The local sponsor and the Federal Government shall comply with all applicable Federal and State laws and regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d) and Department of Defense Directive 5500.11 issued pursuant thereto; Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c).

## f) Hazardous Substances.

The Government will perform any investigations for hazardous substances that the Government determines to be necessary to identify the existence and extent of hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Sections 9601-9675, that may exist in, on, or under lands, easements, and rights-of-way that the Government determines to be required for the project. In addition, should the Government determine to initiate or continue with construction after considering any liability that may arise under CERCLA, the Government will be responsible, as between the Government and the local sponsor, for the costs of clean-up and response, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination for any contamination occurring prior to the end of the period of construction. Any costs of clean-up and response performed after the period of construction will be considered an OMRR&R obligation and will be the responsibility of the local sponsor.

# g) Historic Preservation.

The Government will perform any identification, survey, or evaluation of historic properties and perform or ensure the performance of any mitigation activities or actions for historic properties or that are otherwise associated with historic preservation including data recovery activities that are required prior to the end of the period of construction. Any identification, survey, or evaluation of historic properties performed after the period of construction will be considered an OMRR&R obligation and will be the responsibility of the local sponsor.

## h) Project Partnership Agreement.

Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended (42 USC 1962d-5b), and Section 101 of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 USC 2211), which require that the Secretary of the Army not commence construction of the project, or separable element thereof, until the local sponsor enters into a written agreement to furnish its required cooperation for the project or separable element.

The recommendations for construction of an evacuation center at Mertarvik, Alaska on Nelson Island with appropriate interim life-safety measures reflect the policies governing formulation of individual projects and the information available at this time. They do not necessarily reflect the program and budgeting priorities inherent in the formulation of national civil works water resources program. Consequently, the recommendations may be changed at higher review levels

of the executive branch outside Alaska before they are used to support funding. Planning, design analysis, and construction will conform to the Department of Defense American Indian and Alaska Native Policy-Alaska Implementation Guidance, which honors the trust responsibility to recognized Indian Tribes, maintains a government-to-government relationship with those tribes, and recognizes the sovereignty of those tribes, as declared by Congress.

Kevin J. Wilson

Colonel, Corps of Engineers

District Commander

# Attachment A



Sarah Palin, Governor Emil Notti, Commissioner Michael Black, Director

June 28, 2007

Colonel Kevin J. Wilson Alaska District Commander U.S. Army Corps of Engineers P.O. Box 6898 Elmendorf AFB, AK 99506-0898

# Dear Colonel Wilson:

The Division of Community Advocacy (DCA) within the Alaska Department of Commerce, Community and Economic Development would like to express its support for the Corps of Engineers Proposed Emergency Shelter for the Village of Newtok's relocation site at Mertarvik, Alaska.

The DCA coordinates the Newtok Planning Group, a working group of State and Federal agencies assisting the Village of Newtok in its relocation efforts. As part of the development of a comprehensive relocation strategy for Newtok, the Newtok Planning Group has been exploring ways to address Newtok's critical infrastructure needs at the new village site. Due to the severe nature of storm surge flooding in the existing village, there is a need to identify an interim evacuation site should the existing village become uninhabitable before relocation takes place.

One option the Newtok Planning Group has been exploring to address Newtok's interim evacuation needs is the development of a pioneer camp at Mertarvik with basic, critical infrastructure, including shelter. Pioneer level infrastructure at Mertarvik could also support construction activities during the relocation process.

The Corps of Engineers Proposed Emergency Shelter consisting of a building, generator, water supply, sewage lagoon, and road would be a critical component of the pioneer camp at Mertarvik and would be consistent with the efforts of the Newtok Planning Group. We believe that the development of pioneering infrastructure can also encourage local initiative and participation in the relocation process and provide a catalyst for additional development at the new village site.

As such, we are pleased to provide our support to the Corps for the Proposed Mertarvik Emergency Shelter project.

Sincerely,

Michael L. Black, Director



# NEWTOK TRADITIONAL COUNCIL

P.O. BOX 5545 NEWTOK, ALASKA 99559 PHONE (907) 237-2314 FAX (907) 237-2321



Colonel Kevin J. Wilson
Commander
Attn: CEPOA-PM-C
U.S. Army Engineer District, Alaska
P.O. Box 6898
Elmendorf AFB, Alaska 99506-6898

June 11, 2007

## Dear Colonel Wilson:

The Newtok Traditional Council has reviewed the draft "SECTION 117 PROJECT FACT SHEET" for Newtok, Alaska and wished to express our strong support for the project as outlined by the U.S. Army Corps of Engineers. We agree with the findings of the draft report. We also agree with the provisions stated in the report as part of the recommended plan for construction of an emergency center and access road at the Mertarvik, Alaska site.

The Native Village of Newtok is federally recognized tribe and the Newtok Traditional Council (NTC) is the local governmental entity. The community of Newtok has 315 People. Since Newtok was established in 1954, the Ninglick River has eroded at an average fate of 72 feet per year and is now within 800 feet of the village taking the landfill and barge landing. Barge deliveries have been suspended. Erosion caused a direct hydrologic connection between Newtok and the Ninglick River causing severe flooding from Bering Sea Storms. State of Alaska Declarations of Disaster Emergencies in October 2004 and September 2005 included Newtok. Congress authorized a land swap between Newtok Village Corporation and U.S. Fish and Wildlife Service in 2003 for relocating Newtok. Relocation efforts are a collaboration of many entities including Federal and State of Alaska agencies. The Corps of Engineers is working collaboratively with the Newtok Planning Group to identify features that are not within the usual jurisdiction of other agencies and proposes to provide a shelter facility in a safe location compatible with ongoing relocation plans. The proposed shelter would consist of a building, generator, water supply, sewage lagoon, and road from the shore. Village Safe Water would develop a water source compatible with the emergency shelter and future Newtok relocation. The shelter would be used to house people during emergencies and during relocation efforts when houses are being moved from Newtok to Mertarvik.

We understand that the design and construction of this project will be fully funded by the Corps of Engineers, as appropriations are made available. We further understand that future operation and maintenance will be the responsibility of the Newtok Traditional Council. We understand that the Newtok Traditional Council will be required to

contribute the lands, easements and right-of-way which belong to, or are currently under the control of the Newtok Traditional Council. Any additional real estate requirements will be obtained by the Federal Government. Upon completion of the project the real estate interests will be transferred to the Newtok Traditional Council. This project would be constructed with 100 percent Federal funds and no credit would be given to the Newtok Traditional Council for lands, easements, and rights-of-way.

We are able and willing to enter into a Project Cooperation Agreement and are committed to proceeding to construction of this project.

Sincerely,

Moses Carl, President