Unalakleet

 Unalakleet is located 398 miles northwest of Anchorage and 140 miles southeast of Nome.

Normal tide





Pre-flood photo



Floods occur during the dark of the evening, this photo is hours prior to the peak tide.

Post flood 2005



Getting ready for another assault



Exposed utilities



Once the gabions sank there was nothing to stop the waves from doing damage.



Buildings threatened



This church, teacher housing, a store, a small engines repair shop, a lodge and restaurant, a Post Office, a fish plant, school district fuel tanks, and residential homes are threatened in this section of the village.

Gabion wall



The Corps of Engineers are nearing completion on the design for a rip rap wall that would be built over this gabion wall. The community is very pleased with this recommendation and embraces the project.

Restrictive funding



The funding from the NRCS would not allow a project to be above the contour of the adjacent land so the City put in this rock pile preventing more water damage to the buildings.

Faltering gabions











Water source

The water line runs just under this electric power box from the village to the water plant, 5 miles north of the community. Village Safe Water is working on a design that would move these utility lines along the hillside away from the threat of the ocean.

Access road to water pumphouse



DOT properties



The State DOT&PF has completed the design that would construct a rip rap wall along this section of road and run past the east-west runway to the north. It is expected to go out to bid soon if it already hasn't.



East-west runway



Yukon logs



Kawerak transportation will be elevating the roads adjacent to the ocean this coming construction season.

More Yukon logs



















Gradual migration



There are a dozen homes along the hillside and 3 new houses in the planning stages to built next season. Some have wells and others haul water with their trucks. Gravel pit #2 above



City development



The City has developed a plan for 37 lots in the first phase and over time has 300 available along the first hillside, however, funding is not available to proceed with the utility development.



SHAKTOOLIK

 Shaktoolik is located 400 miles west of Anchorage, 125 miles east of Nome, and 38 miles north of Unalakleet in the eastern Norton sound. The current population of Shaktoolik is 230.
Economics

 The Shaktoolik economy is based on subsistence, supplemented by commercial fishing with full and parttime wage earnings.



Fishing



The commercial fisheries include, herring, crab, salmon, and halibut.

Subsistence

Fish, crab, moose beluga whale, caribou, seal, walrus, rabbit, waterfowl, ptarmigan, berries, greens and roots are primary food sources.



Transportation



Shaktoolik is primarily accessible by air and sea. The state-owned Alex Sookiayak memorial airstrip allows for regular air-service from Nome and Unalakleet. Large cargo is barged to Nome, or St. Michael, then lightered to the village with smaller barges.

Shaktoolik Site History



 Shaktoolik was the first and southernmost
Malemiut settlement on Norton sound, occupied as early as 1839. The village was originally located 6 miles up the Shaktoolik river where reindeer were managed by the local residents.

This site was in a flood free zone, safe from the threats of the ocean surges.

Forced Relocation



In the 1930's the **Bureau of Indian affairs** built a school at the "old site" forcing the residents to relocate to the coast. It was built at this site near the ocean to cut down on mobilization costs but was prone to severe storms and threatening ocean surges.

Looking for Better Shelter



In 1975 the village relocated to its current location following the flood of 1974, 2 miles north to higher grounds and better shelter. The village has the ocean to the west and the river to north and east.



This site provided a safe area to live for 30 years until the storms of 2003, 2004, and 2005. If this trend of storms continue the residents of Shaktoolik are at a very high risk of not only loosing property but lives as well.

Diminishing Shelter



The current site sits on a peninsula at normal tides but becomes a small island during the storms and floods. This photo shows the south end of the peninsula the village sits on and is the only means of access to higher and safer grounds.

Region Wide Support



These are resolutions from Kawerak, Inc.; Bering **Straits Native** Corporation; and the **Bering Straits** Villages supporting Shaktoolik's efforts to acquire assistance from all government agencies.

Community Coming Together







The 3 governing bodies of Shaktoolik are working together to come up with a fully supported solution that they could pursue. Also enclosed is a letter from an elder addressed to former governor Murkowski requesting an evacuation road.

Solution, Solutions?



The flood dilemma in Shaktoolik was a result of a forced relocation by the federal government. We all need to work together to identify and assist in a short and long-term solution for the residents that fear for their very existence in the fall storms.

Emergency expedition?



Having floods 3 years in a row creates a dire need to move quickly for an immediate solution. An evacuation and emergency response plan is identified as the first priority. An evacuation road to the relocation site is also a high priority. Temporary erosion protection, perhaps a seawall, needs to be considered until the community can make the transition to a relocation site. If there is a way to bypass any time consuming requirements to prepare for the next series

of storms all options should be

Studies



The Denali Transportation has awarded Kawerak \$55 to do a reconnaissance study on an evacuation road. The Corps is seeking funding to do a study on the erosion and relocation site.



Thanks



 We appreciate this opportunity to be here and look forward to working with you in the future in addressing our flood and erosion problems.