

## ALASKA BASELINE EROSION ASSESSMENT

# **Erosion Information Paper - Chevak, Alaska**

Current as of December 5, 2008

## **Community Information**

Chevak (CHEE-vack), a.k.a. Kashunamiut, population 908, is along the banks of Ninglikfak River, 17 miles east of Hooper Bay in the Yukon-Kuskokwim River Delta, and approximately 500 miles northwest of Anchorage. The community is incorporated as a 2nd class city in the unorganized borough. The riverbank is used for a variety of community activities including boating, snow machining, ATV access, barge access, boat storage, fishing, hunting, storage, boat access, and parking.

#### **Description of Erosion Problem**

Conditions causing and contributing to erosion reportedly include natural river flow, water level fluctuations, flooding, ice jams, spring break up, melting permafrost, vehicle traffic, boat traffic, pedestrian traffic, and vehicle traffic along the beach and bank of the Ninglikfak River. The riverbank has an estimated erosion rate of 5 to 10 feet per year. The erosion area presently measures a quarter mile to a mile horizontally and 50 to 75 feet vertically at the southeast end of the community.

A Corps *Project Management Plan* prepared for Chevak in 2002, under Section 14 of the 1946 Flood Control Act, identified erosion along the banks of the Ninglikfak River and stated the barge docking area was continuously eroding, making it difficult for barges to dock and unload.

Since September 2008 the community had updated that the conditions of the riverfront have worsened from the initial interview in January 2008.

#### **Potential Damages**

Ongoing bank erosion has made it difficult for barges to dock and is threatening the only road that links the village to the docking area. The road could potentially be destroyed, making it necessary to detour halfway around Chevak. The east side of road that connects to the current barge landing area and the community has blocked off the area to traffic due to the erosion. Structures along the riverside including boat storage sheds, residences, outbuildings, water tanks and lines, fuel tanks, food storage structures, the retail store, utility poles, power lines, boardwalks, pathways, and sites of significant cultural and archeological value are also threatened. The cliff areas also continuously erode and are threatening the homes which are just north and east of them. There is a historical building that are also threatened which are close the edge of the cliffs.

Protection measures used in the recent past to help reduce erosion damage have included placing sandbags and installing fencing. These structures were constructed by the Chevak Traditional Council at an estimated cost of \$50,000 and have been successful in slowing down the erosion process. No repairs or maintenance have been done to date and no additional protection measures have been attempted. The community initiated a "waterfront roads" application to get funding from the Denali Commission for erosion damage, but the application was not completed by the deadline or submitted.

### **Photos and Diagrams**

Photos of erosion have been provided by the Chevak Native Village. A diagram depicting the linear extent of erosion in the community is attached.

#### References

**USACE. 2001**. Section 14 Project Management Plan (PMP), 17 August 2001. Alaska District, U.S. Army Corps of Engineers.

**USACE. 2002.** *Trip Report: Chevak, 27th & 28th of June, 2002.* Alaska District, U.S. Army Corps of Engineers.

**USACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009, completed by RB Slats, Chevak tribal administrator, submitted January 14, 2008.

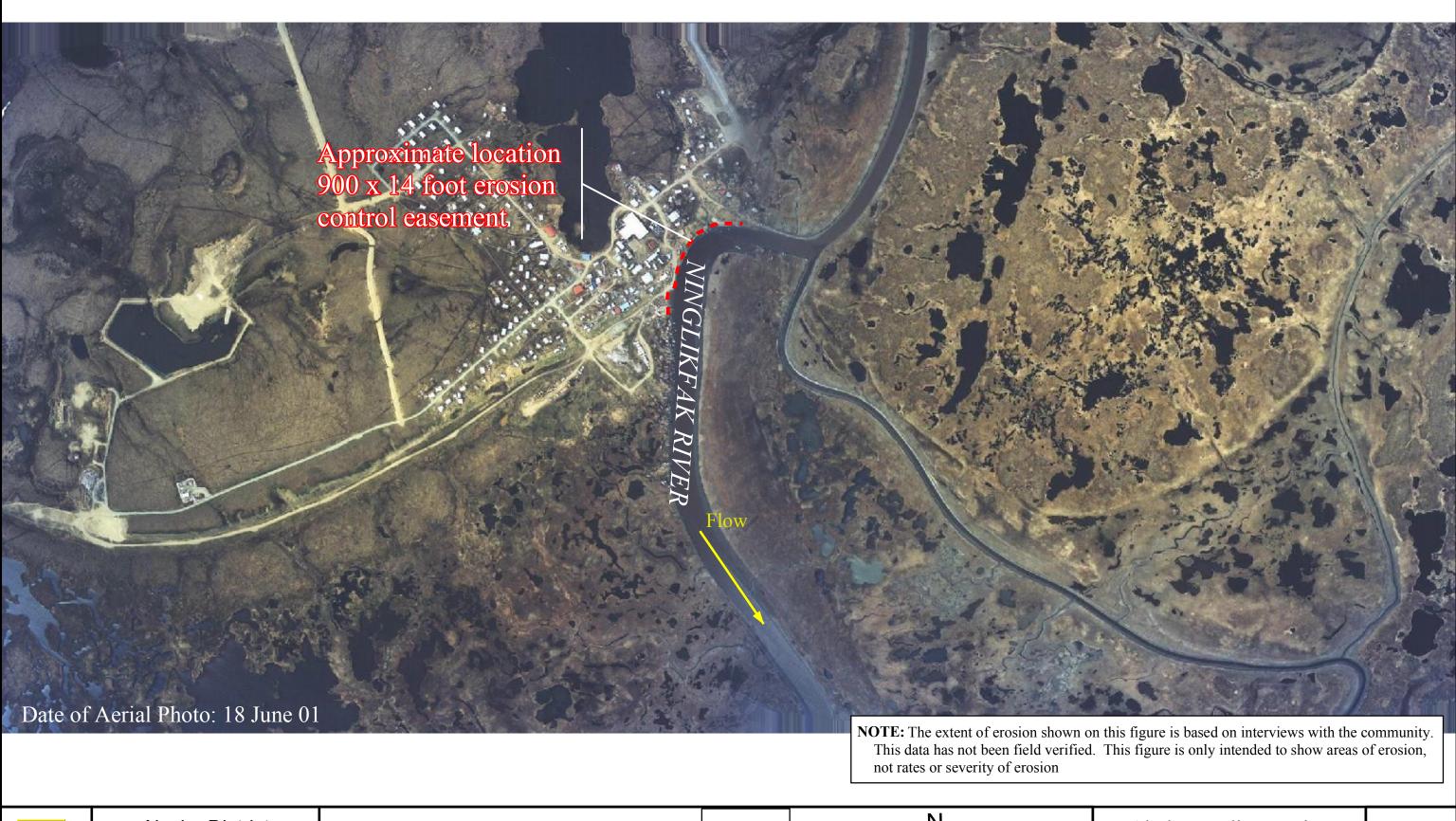
#### **Additional Information**

This information paper, as well as those for other communities, can be accessed on the internet at <a href="https://www.alaskaerosion.com">www.alaskaerosion.com</a>. For more information please contact the Corps of Engineers, project manager at (907) 753-5694 or email <a href="https://www.alaskaerosion.poa.gov">Alaskaerosion.poa.gov</a> description.









Mall Ark

Alaska District Corps of Engineers Civil Works Branch

--- Linear Extent of Erosion





Alaska Baseline Erosion

Chevak, Alaska