



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Atmautluak, Alaska

Current as of August 27, 2007

Community Information

Atmautluak (pronounced aht-MOUTH-luck), population 304, is on the west bank of the Petmigtalek River in the Yukon-Kuskokwim Delta regional basin, 20 air miles northwest of Bethel. The community is in the unorganized borough.

Description of Erosion Problem

The entire length of the community has some erosion. Causes of erosion include natural river flow, spring breakup, melting permafrost, boat wakes and ice jams. The tribal president stated that the river bank and surrounding ground used to be higher but is sinking due to melting permafrost. The lake shore is also eroding due to melting permafrost and occasional strong south winds.

In the last 10 years, three to four ice jams have caused 1 to 2 feet of erosion per event, according to local officials. The Petmigtalek River, a tributary of the Johnson River, erodes approximately 1 foot per year.

Potential Damages

The tribal president stated that seven homes are less than 50 feet from the riverbank. The greatest concerns expressed by the tribal administrator involved: (a) two homes, one that is less than 1 foot away, and another that is estimated at 8 to 10 feet from the river bank; and (b) the post office, estimated at 25 to 30 feet from the river bank. Two modular school buildings are estimated at 40 to 45 feet from the river bank.

An Alaska District Corps of Engineers representative estimated that the main school building was approximately 140 feet from the river bank in both a 1998 and 2000 trip report. Each report included numerous photos, stated that the riverbank next to the post office was a natural cove, and although the water line appeared close to the buildings, erosion was not apparent. The reports did not discuss permafrost conditions in the community. A follow-up letter in 1999 from the Corps to Atmautluak's Traditional Council President stated that there was no apparent threat to public facilities from erosion.

Photos and Diagram

Photos of erosion provided by community are attached. See attached diagram showing linear extent of erosion.

References

DCCED, DCA. 2007. *Atmautluak Community Database Online*,
http://www.commerce.state.ak.us/dca/commdb/CF_BLOCK.cfm

USACE. 1998. *Atmautluak Trip Report*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2000. *Atmautluak Trip Report*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2007. *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 completed by Daniel Nicholai, tribal administrator on July 31, 2007 and Moses A. Pavilla, Sr., president, Village of Atmautluak on August 8, 2007.

Additional Information

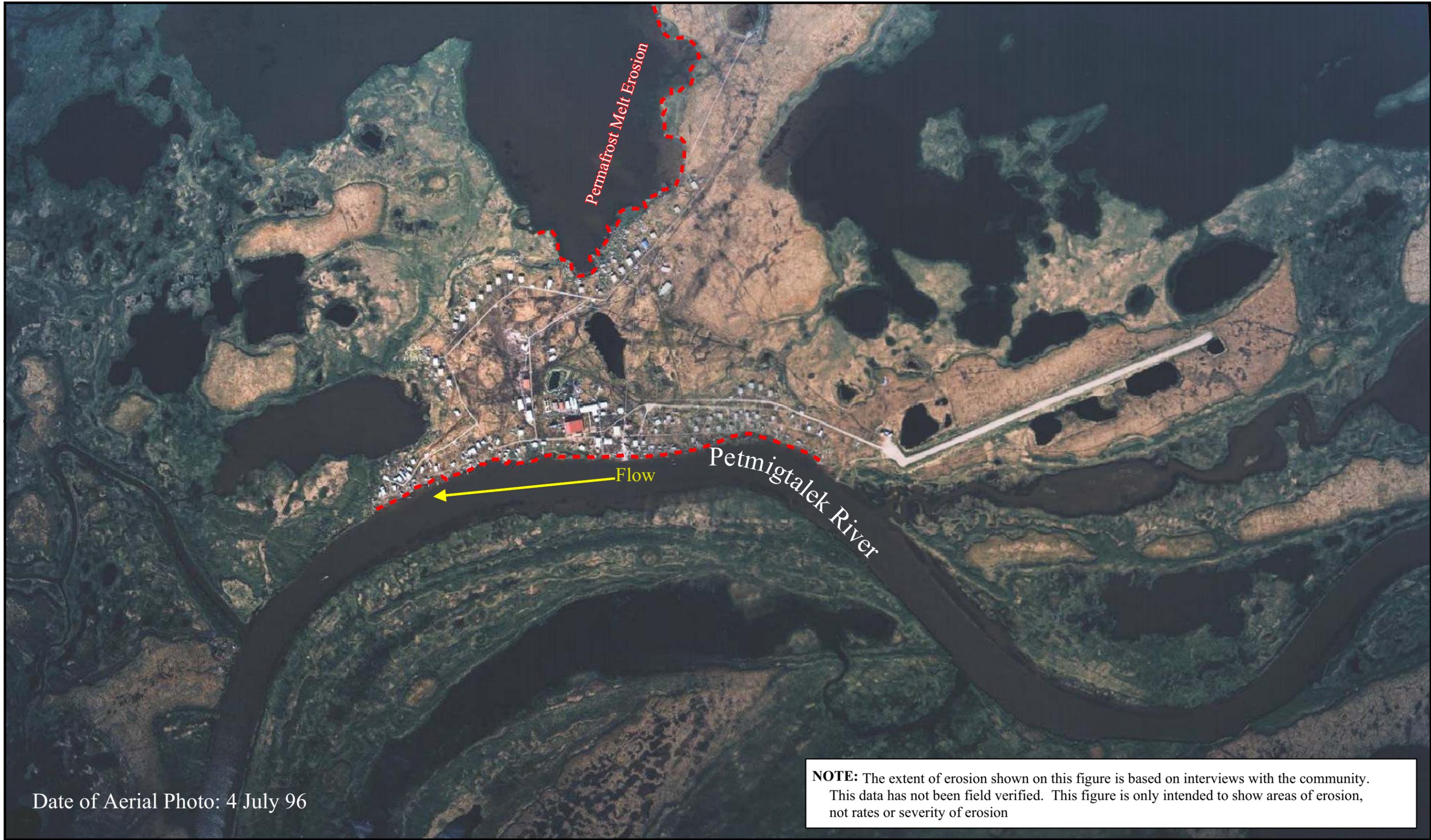
This information paper, as well as those for other communities, can be accessed on the internet at www.alaskaerosion.com. For more information please contact the Corps of Engineers, project manager at (907) 753-5694 or email Alaska.Erosion.POA@usace.army.mil



Photo 1: Erosion of the shoreline dated 16 June 2008

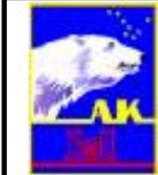


Photo 2: Land under house eroded out dated 16 June 2008



Date of Aerial Photo: 4 July 96

NOTE: The extent of erosion shown on this figure is based on interviews with the community. This data has not been field verified. This figure is only intended to show areas of erosion, not rates or severity of erosion



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--- Linear Extent of Erosion



Alaska Baseline Erosion
Atmautluak, Alaska