



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Toksook Bay, Alaska

Current as of March 31, 2008

Community Information

Toksook Bay (TOOK-sook or TUCK-sook; a.k.a. Nunakuyak), population 598, is on Nelson Island about 115 miles northwest of Bethel. It is on Kangirlvar Bay, across from Nunivak Island. Nelson Island is 42 miles long and 20 to 35 miles wide, covering a land area of 843 square miles. The Toksook Bay is incorporated as a 2nd Class City in the unorganized borough.

Description of Erosion Problem

Erosion is primarily along the Toksook Bay coastline, particularly along the spit that provides a protective barrier for the harbor, boat storage, boat access, and boat launching. The mouth of the Qemqeng River is also eroding. Erosion is reportedly caused by storm surges and wind-driven waves. Pack ice limits erosion during the winter. Late formation of ice may expose the coast to more erosion. Ice on the Qemqeng River it is fairly stable, however an October 2007 coastal storm from south/southeast broke up the ice and packed it along the coast and north bank of the river mouth which caused some bank erosion. The north bank of the river mouth is reportedly eroding faster than the south bank.

Potential Damages

If the spit continues to erode, allowing additional tide, storm surge, and ice to push into this area, boat launching, access, and storage areas would be further threatened. A seawall constructed in the late 1980s along the high water mark is crumbling and deteriorating. The seawall has been effective, but needs maintenance.

Photos and Diagrams

Photos of erosion in the Toksook Bay community are attached, courtesy of Greg Lincoln. Also, attached is a diagram depicting the linear extent of erosion in the community.

References

USACE. 2008. *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 administered to Pius Agimuk, Toksook Bay mayor on March 10, with a follow-up telephone interview with Harry Tulik, Toksook Bay city administrator on March 31, 2008.

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



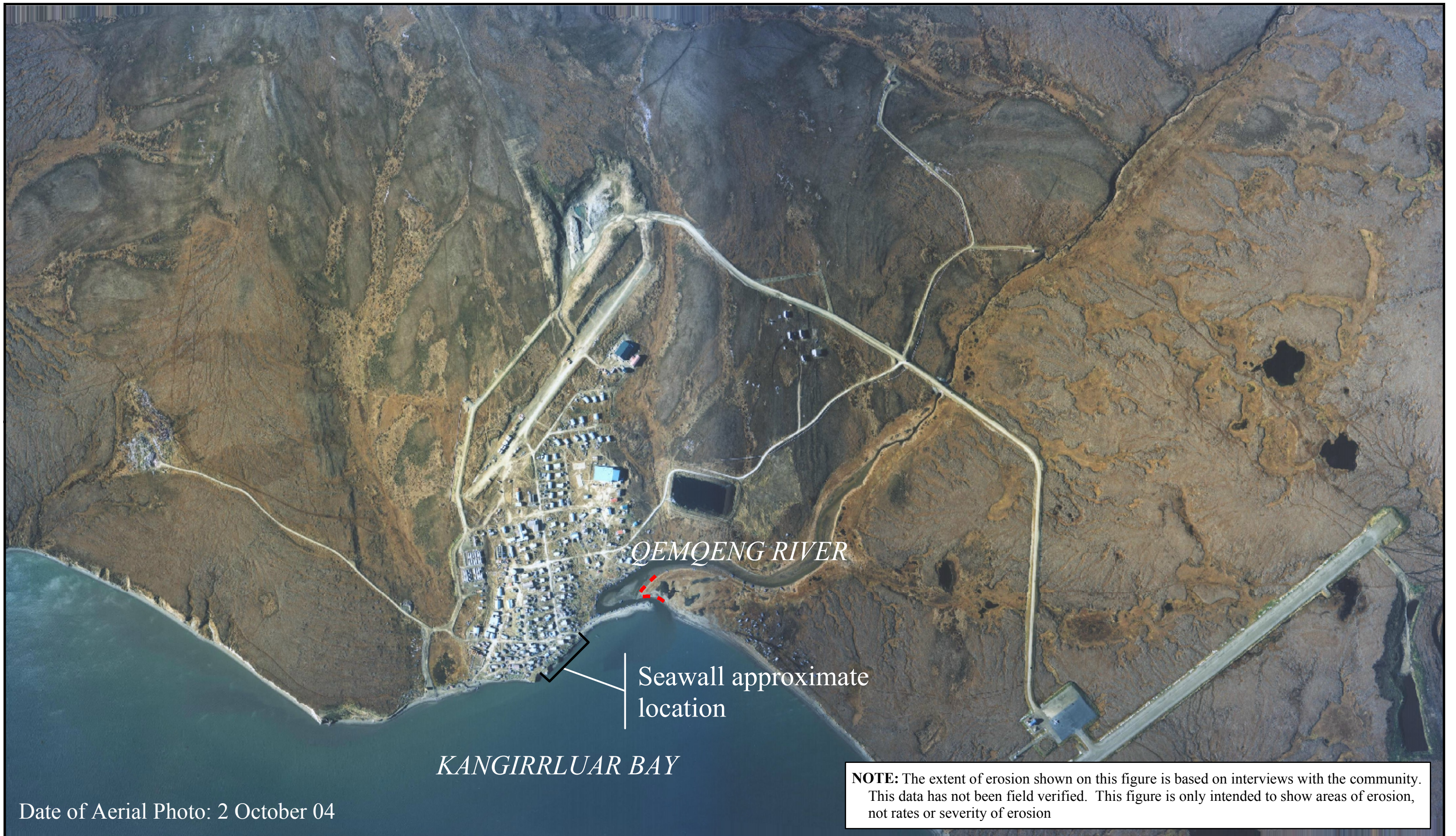
**Photo 1: Toksook Bay gabion basket seawall on Kangirrluar Bay;
photo courtesy of Greg Lincoln, 1998.**



**Photo 2: The lagoon area boat moorage;
photo courtesy of Greg Lincoln, 1998.**



Photo 3: Beach scene; photo by Paul Chimiugak, 2003.

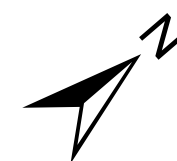


Date of Aerial Photo: 2 October 04



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Civil Works Branch

--- Linear Extent of Erosion



Alaska Baseline Erosion
Toksook Bay, Alaska