



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Shageluk, Alaska

Current as of March 6, 2008

Community Information

Shageluk (SHAG-uh-look), population 124, is in interior Alaska on the east bank of the Innoko River, approximately 20 miles east of Anvik, and 34 miles northeast of Holy Cross. The community is incorporated as a 2nd class city in the unorganized borough. The Innoko riverbank is used for boat access, snowmachine access, barge access, boat storage, fishing, and driftwood collecting. Severe flooding prompted the community to move to its present site in 1966.

Description of Erosion Problem

The community has slow periodic erosion along the banks of the Innoko River. Periodic fluctuations in river flow and water levels, ice jams, spring break up, storm water runoff, and permafrost melt all contribute to erosion. The main erosion area is approximately 300 feet long with bank height that varies from 10 to 15 feet. The majority of community development is on higher ground where the reported erosion rate is gradual, at an estimated 1 to 3 feet per year. Riverside Street is estimated to be 40 to 60 feet from the eroding bank. Erosion is causing a large hole at the end of Main Street, which leads downhill to the river.

Potential Damages

The only erosion protection measure undertaken has been the placement of plastic or filter fabric and gravel overburden along a 4,850-foot section of the airport access road. This was provided by the Department of Transportation and Public Facilities (DOT/PF) in 2001 at an estimated cost of \$1 million. The gravel is beginning to wash away and additional local borrow material is not available. DOT/PF estimated in 2003 that improvements to the airport access road would cost nearly \$7 million. There is no funding budgeted and the project is not listed in the State Transportation Improvement Plan (STIP).

Structures and facilities threatened by erosion include a residence less than 50 feet from the riverbank, a smokehouse that is being undercut by the river, an old gravesite by the corporation tank farm, utility poles and lines providing power to the airport, the Zho-Tse, Inc. fuel tank farm, and the city fuel tanks.

Photos and Diagrams

A photo of erosion provided by the State of Alaska, Department of Environmental Conservation (DEC) is attached. A diagram depicting the linear extent of erosion in the community is also attached.

References

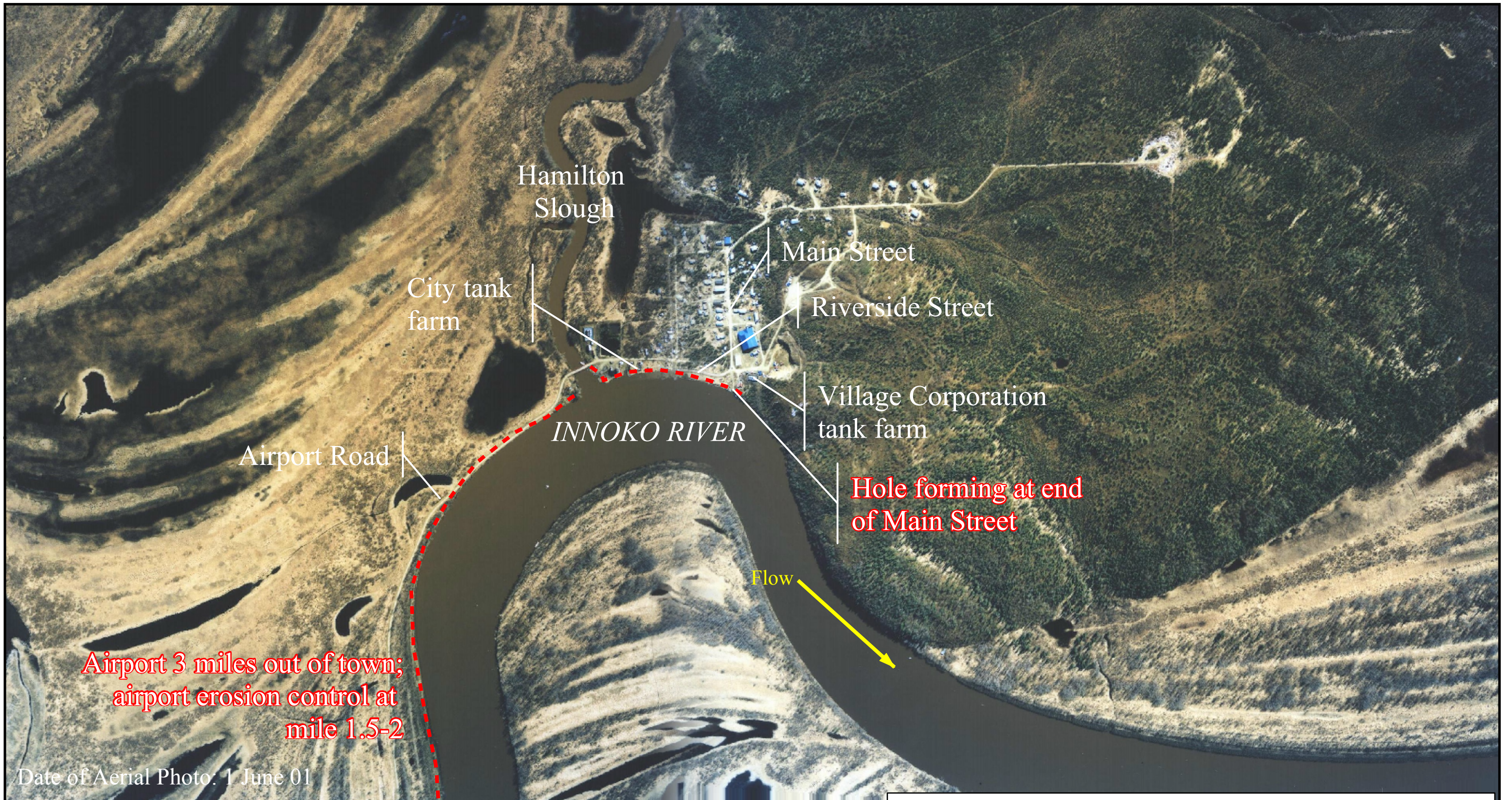
USACE. 2008. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Minnie Kanter, Shageluk city administrator who also interviewed Richard Peters, Shageluk mayor on February 29; Ethan Birkhotz, planning manager, DOT/PF, Fairbanks on March 6, 2008.

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: Shageluk city tank farm with fuel barge docked on Innoko River in background.
Photo courtesy DEC.**



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
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