U.S. Army Corps of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Noorvik, Alaska

Current as of February 23, 2009

Community Information

Noorvik (NOR-vick), population 636, is on the right bank of the Nazuruk Channel of the Kobuk River, 33 miles northwest of Selawik and 45 miles east of Kotzebue. The community is downriver from the 1.7-million acre Kobuk Valley National Park. The community is incorporated as a 2nd class city in the Northwest Arctic Borough. The riverbank is primarily used for barge access, boat storage, and fishing

Description of Erosion Problem

Seasonal variations in flow and water levels, flooding, ice jams, spring break up, and melting permafrost reportedly are causing and contributing to bank erosion along the Nazaruk Channel of the lower Kobuk River. Gravel mining along the riverbanks may have exacerbated the erosion problem. The point at the former gravel mining area and east along the river is eroding and at the beach behind the concrete mat gravel is used to mitigate this area as it is used by barges to dock. Banks are eroding adjacent to the old airport, at the northeast point of the community where a home had to be relocated, below a road that leads down to the river near the Native store fuel tanks, and adjacent to gravel pits downstream from the community.

Potential Damages

The former airstrip, the Native store tank farm, and old fuel tanks are near the riverbank. Both the old and new tanks are estimated to be 500 feet from the riverbank. The National Guard Armory, at least one home, and other structures have been moved to higher ground. The 1986 *Task Force on Erosion Control Final Report by* the Department of Transportation and Public Facilities (DOT/PF) reported the airfield runway that paralleled the riverbank as threatened by advancing erosion. The airport was relocated in the late 1990s. The community used a legislative appropriation to install a concrete mat of concrete blocks along the riverbank at the barge landing site between 1988 and 1990. Seasonal ice has reportedly moved the some of the concrete blocks in the mat and the city has added gravel between the blocks to stabilize the protection system.

Photos and Diagrams

No photos were provided by the community or other sources. The attached diagram shows the approximate linear extent of erosion.

References

Alaska DOT/PF. 1986. *Task Force on Erosion Control Final Report*. Department of Transportation and Public Facilities.

DCCED, DCRA. 1972-1991. *State Legislative Appropriations for Flood and Erosion Control.* Department of Commerce, Community and Economic Development, Division of Community Regional Affairs.

U**SACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Glen Skin, Northwest Arctic Borough public services deputy director on March 28, 2008, and also completed by Tracy Smith and provided via facsimile to the Corps of Engineers on April 3, 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

Former Gravel Mining Area

Flow

KOBUK RIVER (NAZURUK CHANNEL)

Articulated concrete mat erosion control, approximate location.

KOBUK RIVER (NAZURUK CHANNEL)

Flow

Former Gravel Mining Site

Date of Aerial Photo: 26 August 00

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

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