

ALASKA BASELINE EROSION ASSESSMENT

U.S. Army Corps of Engineers Alaska District

Erosion Information Paper - Ekwok, Alaska

Current as of March 11, 2008

Community Information

Ekwok (ECK-wock), population 108, is along the Nushagak River, 43 miles northeast of Dillingham, and 285 miles southwest of Anchorage. The community is incorporated as a 2nd class city in the unorganized borough. Many of the earliest homes in Ekwok were in a low, flat area near the riverbank. Villagers moved the to higher ground after a severe flood in the early 1960s. Community uses of the Nushagak River banks include barge access in spring and fall, boat storage in the summer, and the processing of fishing catch. The river is also used for floatplane landing and takeoff. The bulk fuel storage and generator, a number of private dwellings, and a skiff dock are along the riverfront.

Description of Erosion Problem

Ekwok has occasional major flooding and bank erosion associated with the Nushagak River, primarily caused by seasonal ice jams. Erosion has been gradual, and is not considered a serious problem by some community members, however erosion is listed as an environmental issue of concern to the community in the 2005 *Ekwok Community Comprehensive Plan*. The 1981 and 2003 *Ekwok Community Profile Maps* have a note stating: "much of the riverbank is subject to erosion, according to local sources."

Potential Damages

No structures or facilities were reported threatened or at risk from erosion. The community's list of goals and implementation actions in the Comprehensive Plan does not include protecting against riverbank erosion. Erosion protective measures have not been implemented and none are planned.

Photos and Diagrams

Photos are attached of the community following an ice jam flood. Also, attached is a diagram depicting the linear extent of erosion in the community, based on information provided in the community survey by the city administrator and not from other sources (the community profile maps from 1981 and 2003 showed more extensive erosion areas).

References

Agnew-Beck. 2005. *Ekwok Community Comprehensive Plan*, Developed by the Ekwok Planning Team, Ekwok Village Council, Ekwok Natives Ltd., and the City of Ekwok with assistance from Agnew::Beck Consulting, LLC and the Bristol Bay Economic Development Corporation.

Alaska DCRA. 2003 and 1981. *Community Profile Maps Ekwok*. State of Alaska, Division of Community and Regional Affairs. http://www.commerce.state.ak.us/dca/profiles/profile-maps.htm

USACE. 2008. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Ernie Nelson, Ekwok city administrator on March 11, 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 <u>Alaska.Erosion.POA@usace.army.mil</u>



Photo 1: Ice jam flooding around the Ekwok power plant, May 2002. Photo 2: Fence around the power plant and fuel tanks damaged by ice jam in May 2002.





Photo 3: Ice jam pushed up around power plant, May 2002.



Photo 4: Ice jam flooding at the power plant, May 2002.

NUSHAGAK RIVER

Date of Aerial Photo: 16 June 96



Alaska District Corps of Engineers Civil Works Branch

--- Extent of Linear Erosion



Flow

Ekwok airstrip

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







Ekwok, Alaska