

ALASKA BASELINE EROSION ASSESSMENT

U.S. Army Corps of Engineers Alaska District

# Erosion Information Paper - New Stuyahok, Alaska

Current as of January 9, 2008

# **Community Information**

New Stuyahok (STEW-yuh-hawk), population 472, is on the Nushagak River, about 12 miles upriver from Ekwok, and 52 miles northeast of Dillingham. The community is incorporated as a 2nd class city in the unorganized borough. The community uses and activities along the river bank include barge access, boat launching, boat storage, fishing, social events, and swimming.

## **Description of Erosion Problem**

New Stuyahok is periodically eroded along the banks of the Nushagak River, primarily during spring break up. High water levels, ice jams, and greater susceptibility to bank sloughing as soil along the bank dries out all contribute to erosion. About 2,000 feet of the river bank is eroding with the bank height estimated at 30 to 50 feet above the river. Approximately 20 feet of bank has eroded within the last 20 years, and approximately 3 feet of bank was lost during 2007.

The 1983 U.S. Department of Agriculture *Floodplain Management Study Nushagak and Wood Rivers* reported that New Stuyahok had relocated to its present site to avoid frequent flood damage, however the present site also has flood damage and erosion. Ice jams caused significant flood events in 1957 and 2002 according to a Corps 2002 Trip Report. The water level reportedly rose about 10 feet above normal during the 1957 event and about 8 feet above normal during the May 2002 event. No structures were flooded and no damage was reported.

No erosion damage protection measures have yet been undertaken in the community. Community goals noted in the 2005 *New Stuyahok Comprehensive Plan* are to mitigate erosion. Recommendations include stabilizing erosion-prone areas when new housing and facilities are developed, preventing ATV traffic from traveling down the bank slopes, re-routing trails in the village where appropriate, and limiting development in flood-prone areas.

### **Potential Damages**

Bank erosion is approximately 100 feet from some buildings and facilities, including the school complex and a community sewage lagoon. Native allotments down river and 2 community roads that terminate at the river bank are also threatened by erosion.

### **Photos and Diagrams**

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

#### References

**DCCED. 2001.** *Community of New Stuyahok Community Profile.* State of Alaska, Department of Commerce, Community and Economic Development, Division of Community and Regional Affairs. **New Stuyahok Planning Team. 2005.** *New Stuyahok Comprehensive Plan.* Prepared for the New

Stuyahok Traditional Council, with assistance from Agnew & Beck Consulting, LLC.

**USACE. 2002**. New Stuyahok, Alaska Flood Survey Field Trip Report. Alaska District, U.S. Army Corps of Engineers.

**USAČE. 2008.** Alaska Community Erosion Survey, OMB approved number 07100001, expires September 30, 2009 administered to the New Stuyahok city administrator, William Peterson, Jr., on 9 January, 2008. **USDA, SCS. 1983.** Floodplain Management Study Nushagak and Wood Rivers, Bristol Bay, Alaska. U.S. Department of Agriculture, Soil Conservation Service.

#### **Additional Information**

This information paper, as well as those for other communities, can be accessed on the internet at <u>www.alaskaerosion.com</u>. 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>



Date of Aerial Photo: 4 July 99



Alaska District Corps of Engineers Civil Works Branch

Linear Extent of Erosion - - -





