



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Venetie, Alaska

Current as of March 27, 2008

Community Information

Venetie (VEEN-uh-tie), population 187, is on the north side of the Chandalar River, 45 miles northwest of Fort Yukon and about 45 miles from the confluence of the Chandalar and Yukon Rivers. The community is unincorporated in the unorganized borough. The riverbank is used for boat access, snowmachine access, ATV access, boat storage, fishing, hunting, processing catch, and other activities.

Description of Erosion Problem

Riverine processes of the Chandalar River cause periodic erosion at Venetie. Conditions causing and contributing to the erosion reportedly include fluctuations in river flows and water levels, winter ice build-up and movements, heavy rain events, flooding, and increased runoff accompanying spring break up. Erosion mainly is along the outside of river bends where running water undercuts bank soils, causing overhang and subsequent collapse of the bank. The erosion area reportedly is along about 400 to 500 feet of the riverbank. The erosion rate is estimated at 10 feet per year.

Potential Damages

Water tanks, water lines, boat launches, structures utilized for boat storage and repair, the community well, the well house, sewer lines and sewage lagoons are threatened. All of these structures and facilities are less than 100 feet from the actively eroding river bank, except for the sewage lagoon which is estimated to be between 250 to 350 feet from the eroding bank.

Over the years the community has had to retreat from the edge of the river. A 1977 Corps *Flood Data* report estimates 75 feet of bank in front of the school was lost due to ice scouring in the summer of 1973. Heavy rainfall flooded the community sewage lagoon in 1988 and another major flood-erosion event was caused by local ice movement in 1971. The community well and well house was destroyed by erosion. The Indian Health Service replaced it at a cost of \$620,000 in 1997. The well was destroyed by erosion again in 2005 and replaced by the Alaska Native Tribal Health Consortium (ANTHC). The community is currently consulting with the ANTHC to alleviate threats to the well. The community has not used any erosion protection measures.

Photos and Diagrams

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

References

USACE. 1977. *Venetie Community: Flood Data*. Alaska District, U.S. Army Corps of Engineers.

USACE. 1998. *Correspondence from CEPOA-EOC POA02*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2008. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Eddie Frank, Venetie tribal administrator, on March 24, 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



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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