



**U.S. Army Corps
of Engineers**
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Birch Creek, Alaska

Current as of January 29, 2008

Community Information

Birch Creek population 29, is approximately 26 miles southwest of Fort Yukon. The community is unincorporated and in the unorganized borough. The community of Birch Creek is along the northwest bank of a river of the same name and is surrounded by an extensive lake, river, and slough system. The river continues through state, private, and Yukon Flats National Wildlife Refuge land for a total of 344 miles. The community of Birch Creek is in the refuge. The river shoreline is primarily used as a boat docking area.

Description of Erosion Problem

Erosion is primarily along the river bank on the outside of bends where seasonal variations in flow and water levels can undercut bank sediments, causing overhang and eventual collapse. Flooding, ice jams, spring break up, melting permafrost, rapid snowmelt, summer storms, and heavy rains are reported to contribute to bank erosion. There have been 2 major erosion events in the community in the last 20 years; the first in June, 1992 and the second in May, 2000. The river bank is reported to be eroding 1 foot per year. The erosion area currently measures 500 feet horizontally, 10 to 15 feet vertically, and extends along the front of the community from “uptown all the way to downtown”.

Potential Damages

Several outbuildings, sheds, fuel tanks, water tanks and lines, an access road, boat launches, boat storage, boat repair structures, utility poles, power lines, sewage lagoons, a school, and the water intake system are 100 feet or less from the erosion area. The community is most concerned about the school and the water intake system. Control measures used in the community to stop or slow erosion damage have been the planting of small trees and other plants as suggested at a Tanana Chiefs Convention in 1990. The growth of natural and planted vegetation, which includes willows, grasses, and alders, has helped partially to control erosion.

Photos and Diagrams

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

References

USACE. 2008. *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 completed by Gene Payne, Birch Creek tribal council administrator, submitted via facsimile on January 29, 2008.

U.S. Department of the Interior. 1987. *Yukon Flats National Wildlife Refuge: Comprehensive Conservation Plan, Environmental Impact Statement, Wilderness Review.*

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



Date of Aerial Photo: 1 July 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



Alaska Baseline Erosion
Birch Creek, Alaska