

ALASKA BASELINE EROSION ASSESSMENT

U.S. Army Corps of Engineers Alaska District

Erosion Information Paper - Chitina, Alaska

Current as of December 12, 2007

Community Information

Chitina (CHIT-nuh or CHIH-tee-nuh), population 116, is on the west bank of the Copper River at its confluence with the Chitina River, at mile 34 of the Edgerton Highway, 53 miles southeast of Copper Center, and 66 miles southeast of Glennallen. It is outside the western boundary of the Wrangell-Saint Elias National Park and Preserve. The community is unincorporated in the unorganized borough.

Description of Erosion Problem

Based on the community survey, erosion problems in Chitina are mainly from surface runoff and glacier-fed streams that periodically overflow following heavy rains and during spring runoff. One of the primary streams eroding is 5-Mile Creek, which is near the airport, RV park, the village clinic, and the Alaska Department of Transportation and Public Facilities (DOT&PF) building. Stream flooding and erosion impacted large area in 2006, but erosion is not regularly tracked or measured.

According to the community survey, Chitina is not adversely affected by erosion associated the Copper River or Chitina River, which are adjacent to the community, or from the nearby Kotsina River.

Potential Damages

The heavy spring runoff and a heavy rainy season during October and November of 2006, washed out several locations along the Edgerton Highway leading into Chitina. The roads are maintained by DOT&PF and no repair costs were provided in the community survey. The RV park moved several buildings to avoid flooding of 5-Mile Creek. Several fish wheels are routinely lost along the floodplain. No potential erosion damages were identified by the Chitina village council natural resources director.

Photos and Diagrams

Photos from the National Park Service, Wrangell-Saint. Elias National Park website are attached. Also attached is a diagram of the Chitina community.

References

NPS. 2007. http://www.nps.gov/wrst/naturescience/mccarthy-road-geology.htm

UA, **AEIDC. 1977.** *Chitina*. Prepared by the University of Alaska, Arctic Environmental Information and Data Center.

USACE. 2007. Community Flood Hazard website:

Datahttp://www.poa.usace.army.mil/en/cw/fld_haz/chitina.htm

USACE. 2007. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Carrie Hale, natural resources director, Chitina village council, on December 7, 2007.

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>



Photo 1: Fed by glaciers, the Chitina River is a classic example of a braided river; National Park Service photo, No photo date available.



Photo 2: Fish wheels on the Copper River near Chitina. National Park Service photo, No photo date available.



Photo 3: Aerial view of Chitina; National Park Service photo, No photo date available.

KOTSINA RIVER

TROUT LAKE

SUSIE LAKE

Date of Aerial Photo: 19 July 04



Alaska District Corps of Engineers Civil Works Branch

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5 Mile Creek, not shown on photo,erosion area

Linear Extent of Erosion

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





