



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

### **Erosion Information Paper - Central, Alaska**

Current as of February 11, 2008

#### **Community Information**

Central (SEN-trul), population 89 year round and grows to about 119 in the summer with seasonal residents, is on the Steese Highway about 125 miles northeast of Fairbanks and 28 miles southwest of Circle. The community is unincorporated in the unorganized borough. The community of Central is along the banks of the Yukon River at the end of the Steese Highway

#### **Description of Erosion Problem**

A dike along Crooked Creek is periodically eroded and repaired every 3-5 years when snowmelt run-off or heavy rainfall cause high, fast water and flooding. The dike was installed by State of Alaska Department of Transportation and Public Facilities (DOT&PF) in 1971 to protect abutments and help direct the flow of Crooked Creek through the Steese Highway Bridge at Central. The eroding area is approximately 100 yards long, 10-12 feet high to the top of the dike, and both up and downstream of the Steese Highway Bridge at Mile 128 where the road passes through Central. Another dike along Crooked Creek reportedly protects the Central airport, but this dike has not been subject to erosion. Major flooding in Central was reported in 1967, 1986, 1989, 2005, and 2006.

#### **Potential Damages**

The Steese Highway and Bridge at Mile 128 would be threatened if the dike protecting the highway and bridge abutments should fail. Periodic erosion downstream of the bridge has previously taken private property, but no structures are currently threatened. Erosion damage to the dike from the 2005 flood event was still under repair when it was flooded again in 2006. Repairs were finished in 2006 at a cost of \$25,000 for riprap. Repairs to this section may be temporary because the creek hits the dike upstream from the bridge at a 90-degree angle. The Steese Highway is the only road to Central Airport, which supports Bureau of Land Management fire fighting and the Central area mining industry. The Steese Highway Bridge provides the only road access to the community of Circle. Residents from nearby communities along the Yukon River also use the Steese Highway to travel between the Yukon River and Fairbanks.

#### **Photos and Diagrams**

Photos of erosion provided by DOT&PF are attached. Also, attached is a diagram depicting the approximate linear extent of erosion in Central.

## References

USACE. 1990. *Reconnaissance study memo: Preliminary Reconnaissance Study for Central, Alaska*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2008. *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 administered to Richard E. Tyrrell, foreman Central DOT/PF maintenance, on February 11, 2008.

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## Additional Information

This information paper, as well as those for other communities, can be accessed on the internet at [www.alaskaerosion.com](http://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](mailto:Alaska.Erosion.POA@usace.army.mil)



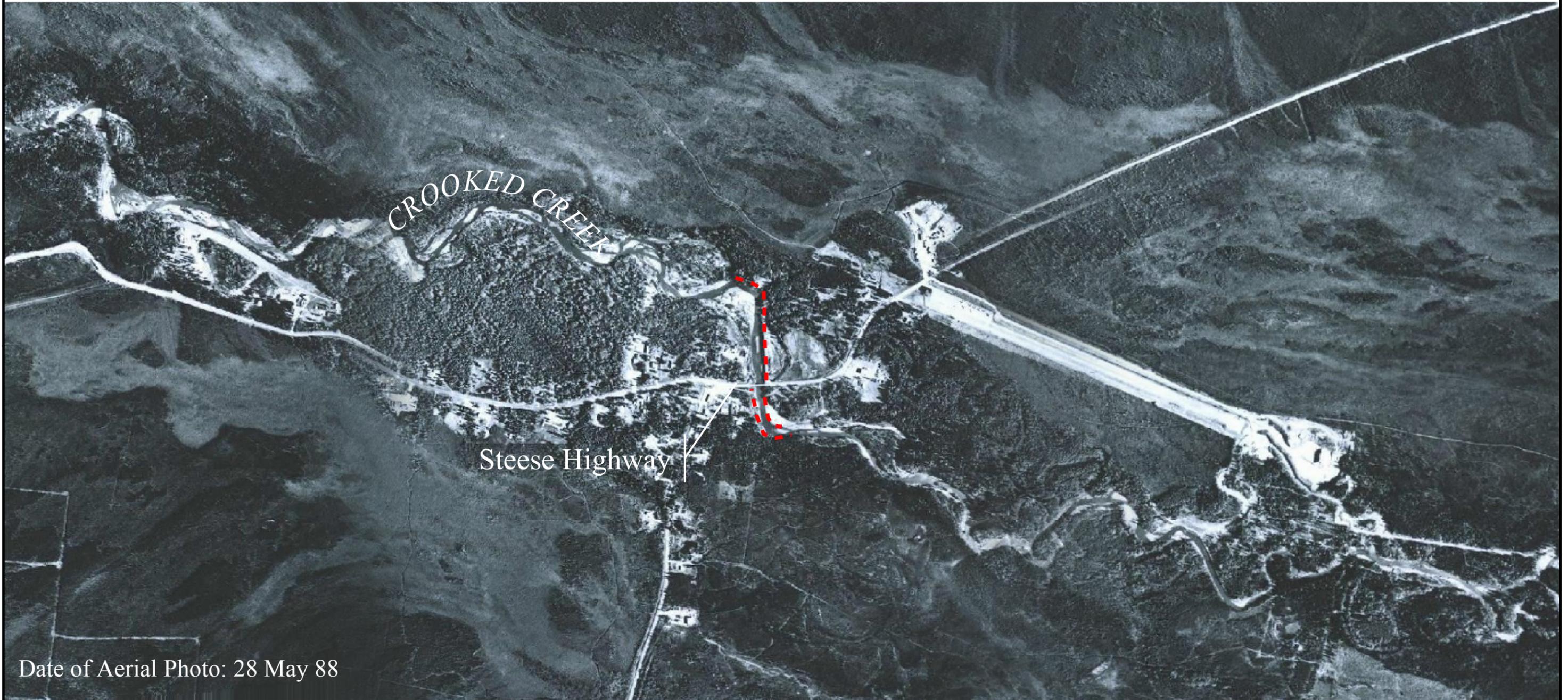
**Photo 1: Crooked Creek dike through Central during high water, June 2006.**



**Photo 2: Central dike during flood, June 2006.**



**Photo 3: Central erosion from Crooked Creek at mile 128 past the Steese Highway bridge, with DOT/PF shop in the background, 1989.**



**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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