



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

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

Current as of January 29, 2008

#### **Community Information**

Wiseman, population 22, is located in the Brooks Range on the middle fork of the Koyukuk River, at the junction of Wiseman Creek. It is about 260 miles northwest of Fairbanks off the Dalton Highway, 13 miles north of Coldfoot, and 75 miles north of the Arctic Circle. The Dalton Highway, which passes near Wiseman, is also known as the 414-mile long “pipeline haul road” constructed in 1974. The community is unincorporated and within the unorganized borough. The following information on erosion was obtained through telephone interviews and completion of an OMB Community Erosion Survey with the vice chair of the Wiseman community association in January 2008.

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

According to the erosion survey, the community of Wiseman is subject to periodic erosion occurring along the middle fork of the Koyukuk River and Wiseman Creek. Wiseman Creek runs through and divides the community, and a bridge that crosses the creek connects the 2 parts of the community. Conditions causing and contributing to the river and creek erosion include fluctuations in water flows and levels, flooding, ice jams, spring break up, and high water after heavy rains. The community estimated that the annual erosion rate along cut banks of the middle fork Koyukuk River is 1 to 2 feet per year. Periods of accelerated erosion reportedly occurred in August 1994, during a prolonged period of heavy rain, and again in May 1998, during a period of accelerated snow melt. The community reports that it experiences flooding every 2 or 3 years, with the flood of record occurring in 1937.

It was also reported by the community that some erosion is occurring on Wiseman Creek at the up-river ends of the dikes built upstream from the bridge that crosses the creek. In 1998, heavy rains and rapid snowmelt caused the creek to cut through its bank and flow through adjacent property. A concern to the community is winter overflow along the creek. During these overflow conditions, which the community reports to be a yearly event, water can flood into the community.

#### **Potential Damages**

At this time, the most significant erosion threat to the community is to the 3-mile long access road located along the Koyukuk River, which connects the community to the Dalton Highway. The community reported that in 2006, the Alaska Department of Transportation and Public Facilities (DOT&PF) placed riprap along the Koyukuk River to protect the access road. The community also reported that some private property has been lost to erosion along the Koyukuk River, but at this time no structures are threatened.

In addition to the rip rap placed by DOT&PF along the Koyukuk River to protect the community access road, additional erosion protection measures to help reduce erosion damage in use in and near the community include placement of riprap-protected dikes along Wiseman Creek upstream from the bridge that connects the 2 parts of the community across the creek. Prior to the adding of riprap to the dikes, yearly repairs were required. The community also reported that since the cutting of Wiseman Creek through adjacent property that occurred in 1998, at least 1 home is endangered by the new creek channel location.

### **Photos and Diagrams**

Photos are attached that were provided by Heidi Schopphorst, vice chair of the Wiseman community association, and Nicole Grewe, State of Alaska, Department of Commerce, Community and Economic Development, Division of Community and Regional Affairs. Also, attached is a diagram depicting the linear extent of erosion.

### **References**

**USACE. 1973.** *Flood Data: Wiseman.* Alaska District, U.S. Army Corps of Engineers.

**USACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001,* expires September 30, 2009 administered to Heidi Schopphorst, vice chair of the Wiseman community association, on January 29, 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: Wiseman Creek as it winds through Wiseman to The Koyukuk River; photo by Heidi Schopphorst, No photo date available.**



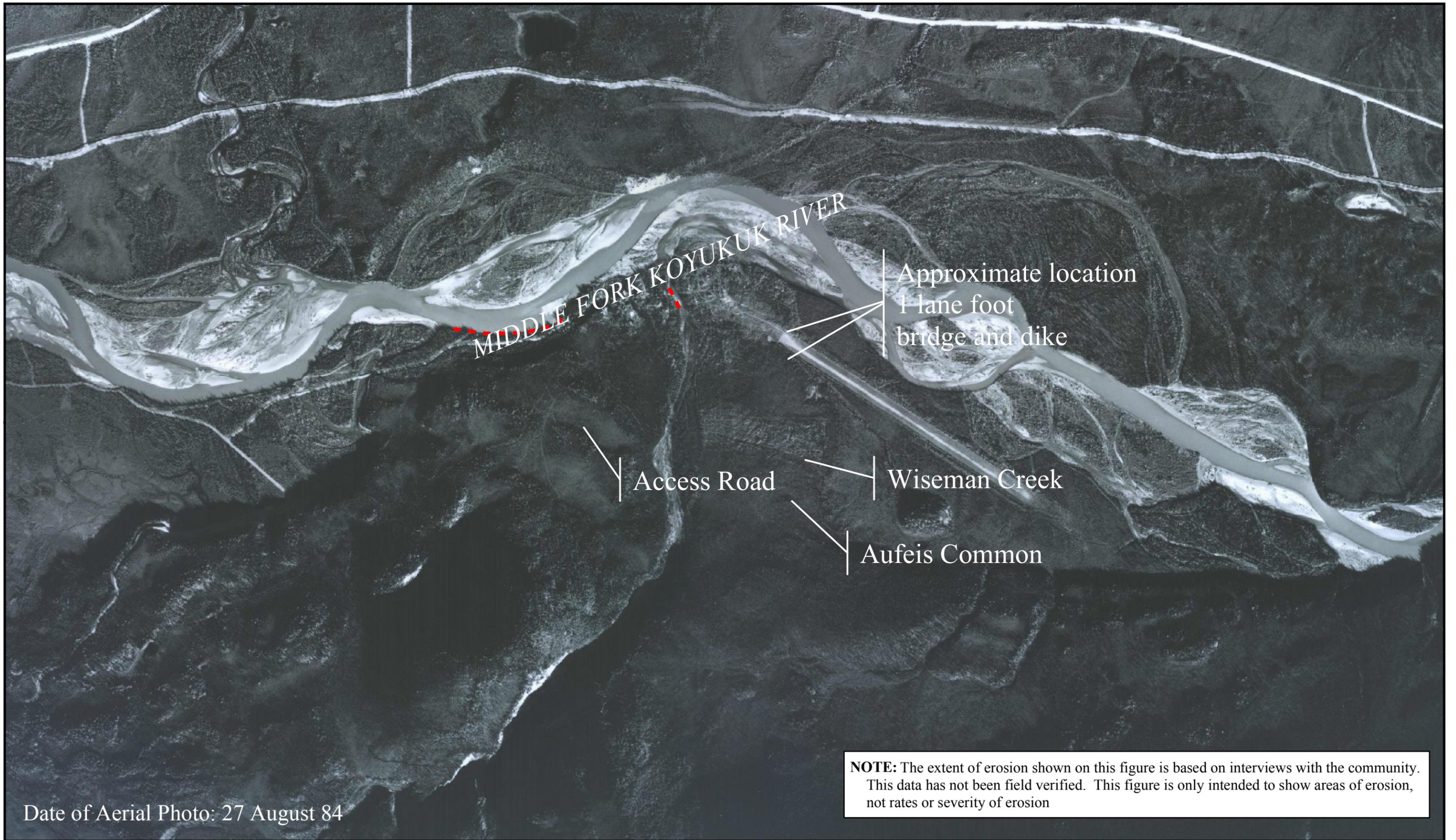
**Photo 2: Wiseman Creek levee; photo by Heidi Schopphorst; No photo date available**



**Photo 3: Wiseman's 1-lane bridge; photo by Nicole Grewe, DCRA©, August 2006.**



**Photo 4: Access road to Wiseman is adjacent to the middle fork Koyukuk River; photo by Nicole Grewe, DCRA©, August 2006.**



Date of Aerial Photo: 27 August 84

**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  
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