

# ALASKA BASELINE EROSION ASSESSMENT

# **Erosion Information Paper – Pile Bay-Williamsport** Road, Alaska

Current as of October 10, 2007

## **Community Information**

The Pile Bay-Williamsport Road, also known as the Portage Road, is a 15.5 mile roadway that allows commercial fishing boats and other materials to travel across the Chigmit Mountains that separate Cook Inlet on the west and Iliamna Lake to the east. Iliamna Lake drains into Bristol Bay, so the short portage reduces the journey between Cook Inlet and the Bristol Bay fisheries by almost 1,000 miles. The one-lane, unpaved Williamsport-Pile Bay Road was constructed in the 1930s and is owned and maintained by the state. The state plans to improve the road in 2009. Approximately half the Pile Bay-Williamsport Road is in the Kenai Peninsula Borough, with the remainder in the Lake and Peninsula Borough.

## **Description of Erosion Problem**

High water during heavy rainfall erodes the roadbed and washes out the road surface. The problem is greatest along the drainages that are adjacent to much of the road alignment.

No erosion problems along the coastline of Williamsport, or along the shoreline of Lake Iliamna at Pile Bay were reported in the survey.

### **Potential Damages**

During the heavy rainstorms and flooding that occurred in late-September-early-October 2003, sections of the roadway eroded and washed out between Williamsport and Pile Bay settlement area near Lake Iliamna. For a period of time the road surface of the Iliamna River bridge, built in 1937, was under about 4 feet of water. This area has the Teddy Swamp floodplain area on the Pile Bay side of the river. Flooded areas and likely erosion areas are shown inundating the road at the Williamsport Bay end on the Lake and Peninsula Borough maps of the area. Likely, but unconfirmed, erosion areas along Chinkelyes Creek, Williams Creek, at 3 mile bridge, 4 mile bridge and 6 mile culvert are assumed, from review of the 1-inch = 500-foot scale maps of Williamsport and Pile Bay prepared by the Lake and Peninsula Borough. No information is available regarding the costs of repairing erosion damage to the road. Heavy rainfall could cause similar damage in the future.

## **Photos and Diagrams**

Photos of erosion damage to the road from the 2003 flood provided by the Kenai Peninsula Borough office of emergency management are attached. Additional photos can be found at: <a href="http://www.borough.kenai.ak.us/emergency/Current/wport\_pile.htm">http://www.borough.kenai.ak.us/emergency/Current/wport\_pile.htm</a> Also, attached is a diagram showing the western end of the road at Pile Bay.

#### References

Alaska DOT/PF. 2004—2006 State Transportation Improvement Plan (STIP)

**BBNA. 2005.** Comprehensive Economic Development Strategy. Prepared by Bristol Bay Native Association.

**LPB. 2007**. *Pile Bay and Williamsport Community Maps*. Lake and Peninsula Borough www.lakeandpen.com

KPB Online: http://www.borough.kenai.ak.us/emergency/Current/wport\_pile.htm

**USACE. 1993.** Reconnaissance Report for Navigation Improvements - Williamsport, Alaska. Alaska District, U.S. Army Corps of Engineers.

**USACE. 1995.** DRAFT Navigation Channel Feasibility Report and Environmental Assessment / Williamsport. Alaska District, U.S. Army Corps of Engineers.

**USACE. 2007.** *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Marv Smith, Lake and Peninsula Borough planner in October 2007.

#### **Additional Information**

This information paper, as well as those for other communities, can be accessed on the internet at <a href="https://www.alaskaerosion.com">www.alaskaerosion.com</a>. For more information please contact the Corps of Engineers project manager at (907) 753-5694 or email <a href="https://www.alaskaerosion.com">Alaskaerosion.POA@usace.army.mil</a>



Photo 1: Williamsport Road washed out from 2003 Flooding.



Photo 3: Williamsport Road washed out from 2003 Flooding.



Photo 2: Iliamna Bridge 4 feet underwater, 2003 flooding.



Photo 4: Williamsport Road washed out from 2003 Flooding.

