



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

### **Erosion Information Paper – Pedro Bay, Alaska**

Current as of October 19, 2007

#### **Community Information**

Pedro Bay (P-droh), population 55, is at the northeast end of Iliamna Lake, 176 air miles southwest of Anchorage, on the Alaska Peninsula. The community is unincorporated in the Lake and Peninsula Borough. Pedro Bay is accessible only by air and water. The community uses the lake for subsistence hunting and fishing, and recreation.

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

According to the village council administrator and the community erosion survey, erosion is reported to not be a problem in the community. 3 rivers are nearby: the Pile River, 6 miles west; the Iliamna River, 11 miles southwest; and the Knudson River, 2 miles northwest of the community. The Pile and Iliamna Rivers are navigable. The Knudson River is a fairly shallow glacial outwash river and is not navigable. The community is surrounded by steep mountains, so streams and rivers become swift during periods of heavy rainfall, but recede quickly. According to the community administrator, the Knudson River comes out of the mountains with steep gradient, and at times moves lots of boulders and debris.

The lake shore area can infrequently flood, with some associated erosion, primarily caused by storm driven waves on Iliamna Lake. The only recorded flooding and erosion in the area was in 1970 during heavy rains. According to the 1973 Corps report: *Flood Data: Pedro Bay*, there have been no reports of flooding or erosion near the lake since 1970.

#### **Potential Damages**

The 1970 flooding and erosion did not reach the community and there was no damage to property and structures. Several years ago the Knudson River flooded, and a tributary overflowed and cut the runway in half. The community sandbagged the area and the state dug a channel around the airport. The channel directs water around the airport instead of across the runway. Costs of this project are not known. The state online community database indicates that \$910,000 was spent in 1994 for airport and runway erosion control and repair work. According to the Pedro Bay village council administrator, private homes along the Knudson River are sufficiently set back from the river to not be adversely impacted by any potential erosion that might occur. There is a barge access area on Iliamna Lake, and the community is seeking funding to develop a barge landing.

#### **Photos and Diagrams**

Photos of Pedro Bay provided by the Pedro Bay village council website [www.pedrobay.com](http://www.pedrobay.com). Also, attached is a diagram of the Pedro Bay community.

## References

**Environmental Services Limited. 1982.** *Pedro Bay.*

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

**USACE. June 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 John Foss, Pedro Bay village council administrator on October 15, 2007.

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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: Approaching Pedro Bay from the west, date of photo not available.**



**Photo 2: Knutsen Bay looking west, date of photo not available.**



**Photo 3: Barging onto Pedro Bay on Iliamna Lake, date of photo not available.**



**Photo 4: Fall Storm, date of photo not available.**



Date of Aerial Photo: 28 August 02

*PEDRO BAY*

*LAKE ILIAMNA*



Alaska District  
Corps of Engineers  
Civil Works Branch

--- Linear Extent of Erosion



Alaska Baseline Erosion  
Pedro Bay, Alaska