



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

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

Current as of May 2, 2008

#### **Community Information**

Teller, population 258, is a gravel spit on the Seward Peninsula, between Port Clarence and Grantley Harbor, 72 miles northwest of Nome. The Bob Blodgett Highway, a 73-mile gravel road usually open May to September, connects Teller with Nome. The community is incorporated as a 2nd class city in the unorganized borough.

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

Teller is on a gravel spit that separates Port Clarence on the Bering Sea to the west. Storm surges, high tides, and wind-driven waves reportedly contribute to erosion at Teller along the western Port Clarence side. The erosion area is about 600 feet long with a 10-foot-high bank. Erosion is reported to be slow, but persistent. Teller is also prone to storm surge flooding. The most recent flooding in Teller was in October 2004. The worst flood is believed to have been in 1974 when the water level rose 5 feet, flooding 50 homes, the Catholic Church, Lutheran Church, school, stores, Post Office, Teller Native corporation offices, city hall, and bingo hall.

#### **Potential Damages**

The 1984 Alaska Department of Transportation and Public Facilities (DOT/PF) *Task Force on Erosion Control Final Report*, stated the sewage lagoon and 2 large fuel tanks were protected by a wall consisting of a sheet pile center and barrel wings. The barrels were welded together side by side, end to end, 3 tiers high, and filled with gravel. Gaps between the sheet pile and barrel sections were protected by rip rap. The cost of the wall was not reported. The report recommended the barrel wall be monitored for deterioration and replaced either with sheetpile or grout-filled barrels inter-tied with rebar as needed. No repair or maintenance has been provided for the wall and present condition is unknown. Storm surges and high tides accompanied by wave action threaten the cemetery and a road. According to the 2003 *Bering Strait Comprehensive Economic Development Strategy 2003-2008*, the community includes the erosion threat to graves as a priority.

#### **Photos and Diagrams**

A photo of waves hitting the Teller seawall is attached, courtesy of David E. Atkinson, University of Alaska Fairbanks. Also, attached is a diagram depicting the linear extent of erosion.

## References

**AK DOT/PF. 1984.** *Task Force on Erosion Control Final Report.* Alaska Department of Transportation and Public Facilities.

**Atkinson, David E. 2007.** *Understanding Coastal Erosion in Alaska: Alaska Center for Climate Assessment and Policy (ACCP) Statewide Teleconference.* International Arctic Research Center, Atmospheric Science Program, University of Alaska Fairbanks.

**Kawerak, Inc. 2003.** *Bering Strait Comprehensive Economic Development Strategy 2003-2008.* Published by Kawerak Inc. and the Bering Strait Development Council.

**USACE. 1975.** *Letter to Edward Newbury from H. W. Holiday.* October 23, 1975. Alaska District, U.S. Army Corps of Engineers.

**USACE. 1992.** *Community Information Form, Teller, AK.* Alaska District, U.S. Army Corps of Engineers.

**USACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001,* expires September 30, 2009 administered to Charlene Isabell, native village of Teller (Teller Traditional Council), on May 2, 2008, provided via facsimile.

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## Additional Information

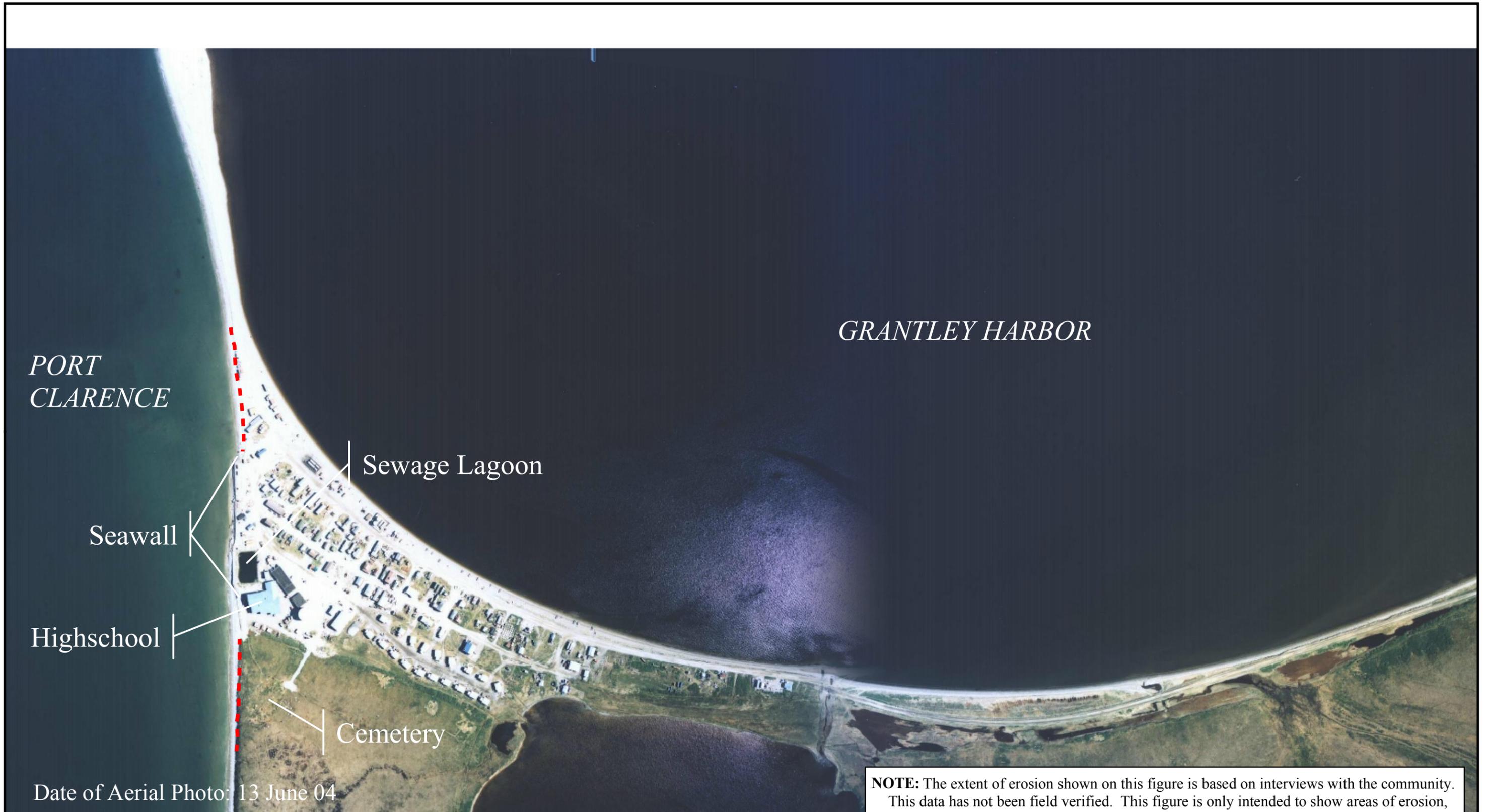
This information paper, as well as those for other communities, can be accessed on the internet at [www.alaskaerosion.com](http://www.alaskaerosion.com). For more information please contact the Corps of Engineers, project manager at (907) 753-5694 or email [Alaska.Erosion.POA@usace.army.mil](mailto:Alaska.Erosion.POA@usace.army.mil)

waves

Teller, AK



**Photo 1: Waves hitting Teller seawall; photo courtesy of David E. Atkinson, UAF, International Arctic Research Center, 2007.**



**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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