



**U.S. Army Corps
of Engineers**
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Wales, Alaska

Current as of October 15, 2007

Community Information

Wales (WAILZ, a.k.a. Kingigin), population 139, is on Cape Prince of Wales, at the western tip of the Seward Peninsula, 111 miles northwest of Nome. The community is incorporated as a 2nd class city in the unorganized borough. The community uses at the local beach for fishing, hunting and beachcombing.

Description of Erosion Problem

According to the community survey, erosion is associated with the Bering Sea coastline. Strong storms, high tides, wind and waves, and flooding are causes of and factors contributing to erosion.

A major coastal erosion event, reported to be the worst in the last 20 years, occurred during 2004. In this event, a strong storm from the Bering Sea brought high tides and winds causing flooding and erosion in 3 areas. Each area was approximately 20 feet in length and along a 6 foot high shore bluff. The erosion caused by the 2004 storm left the washeteria and city "Dome" buildings less than 100 feet from the active erosion area.

Major floods in the area occurred in 1933 and 1969, although no water was reported to have entered the community. A 1974 storm caused minimal damage. A 1984 report prepared by the State of Alaska Department of Transportation and Public Facilities noted no significant erosion problems.

Potential Damages

The cemetery, sewer lines, and septic leach fields (see linear extent of erosion) are community buildings and associated improvements near the coast considered to be at risk from coastal erosion during strong storms. The community, except for a few buildings on the hillside is within the 100-year floodplain. There is at least one home at risk now built on the sand dune on the beach at about 50 feet or less from the coast. The homeowners have put out sandbags to help slow the erosion from their home.

No protective measures have been installed to reduce erosion damage. Identified at-risk facilities have been considered for repair or relocation. The survey respondent stated that Federal Emergency Management Agency estimated costs for repairs at present levels of damage to be about \$1,300 for fuel tanks, \$ 3,500 for the cemetery, \$4,200 for the washeteria leach field, and \$4,100 for the city dome leach field.

Photos and Diagrams

A photo of the erosion area in Wales provided by Kawerak Inc. is attached. Also, attached is a diagram depicting the linear extent of erosion in the community.

References

ADOTPF. 1984. *Task Force on Erosion Control Final Report.* Alaska Department of Transportation and Public Facilities.

ESL. 1980. *Wales.* A report prepared by Environmental Services Limited.

USACE. 1986. *Wales, village information form.* Alaska District, U.S. Army Corps of Engineers.

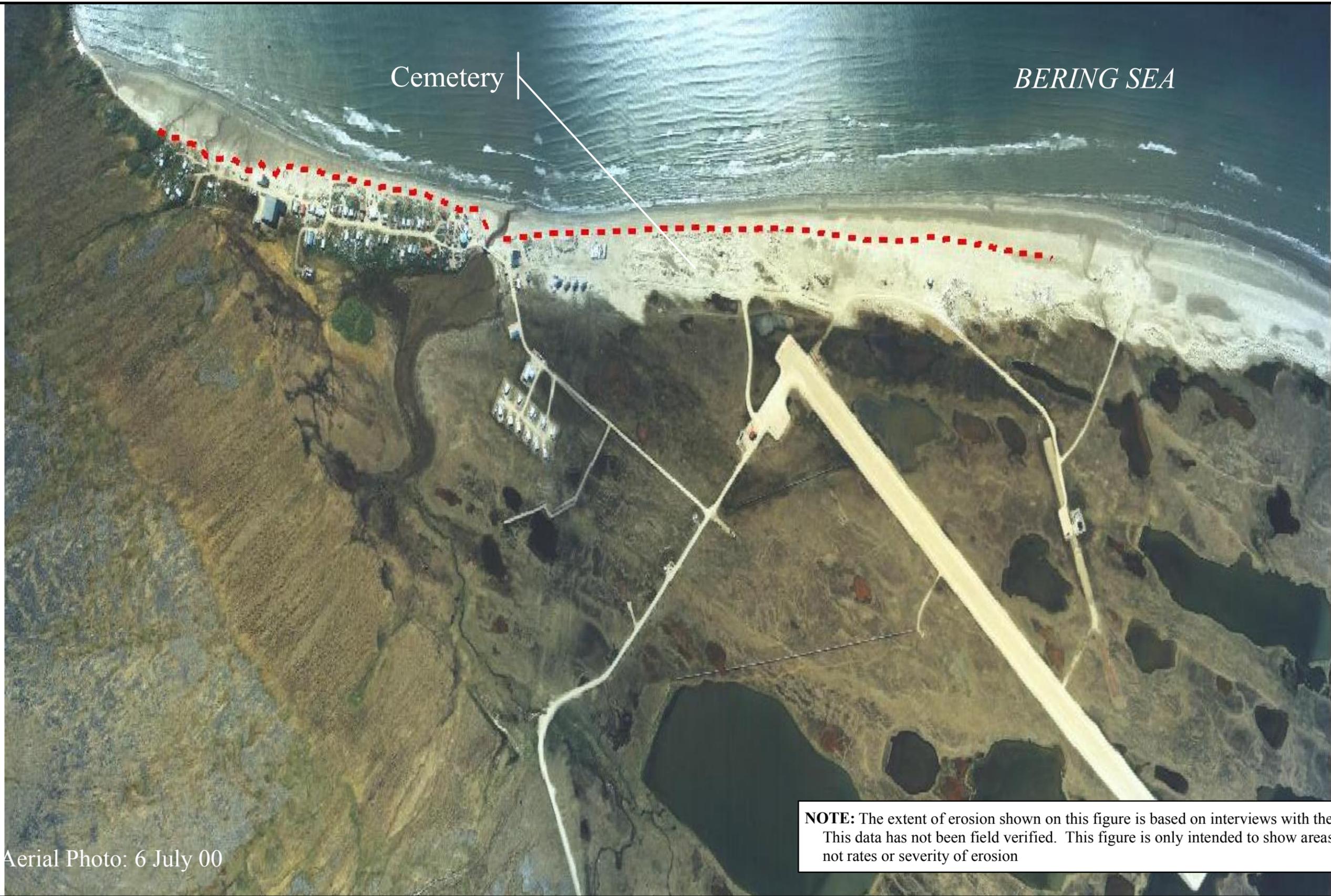
USACE. 2007. *Alaska Community Erosion Survey, OMB approved number 07100001,* expires September 30, 2009 was provided by facsimile on August 16, 2007. Alaska District, U.S. Army Corps of Engineers.

Additional Information

This information paper, as well as those for other communities, can be accessed on the internet at 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



Photo 1: Aerial View of Wales Community



Cemetery

BERING SEA

Aerial Photo: 6 July 00

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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