



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

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

Current as of June 2, 2008

#### **Community Information**

Nanwalek (nan-WAH-leck), formerly English Bay, population 235, is near the southern end of the Kenai Peninsula, 10 miles southwest of Seldovia. Nanwalek is an unincorporated community in the Kenai Peninsula Borough. Community activities in or near erosion areas include barge and boat access to the inlet, fishing, beachcombing after storms, some cultural and social events, and driftwood collecting. The only airstrip serving Nanwalek runs the length of the spit between English Bay Lagoon and Cook Inlet.

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

Nanwalek is on an exposed coastline in lower Cook Inlet. High tides, storm surges, wind and waves erode the spit separating English Bay Lagoon from Cook Inlet and high bluffs that rise 20 to 50 feet above the inlet. The bluffs are eroding at an estimated rate of 1 to 2 feet per year. The spit is eroded by winter storms.

#### **Potential Damages**

Storm waves, primarily during the winter, have eroded beach material and washed out sections of the runway. Erosion damage is reported to be an annual event. The road connecting the runway to the community was eroding, but now is protected by riprap placed by the Bureau of Indian Affairs (BIA). The riprap also protects the parsonage and other buildings close to the road. The Nanwalek IRA Council is concerned that continued erosion could severely damage or destroy the runway, which is vital to transportation, or the road to the runway. Severe erosion also could breach the spit, which would impact valuable marine habitat and important subsistence resources.

Erosion of the bluffs on the south, west and east margins of a point of community land surrounded by Cook Inlet also threatens Nanwalek infrastructure. Continued erosion of the south bluff could damage a road and structures near the bluff, including the village council offices and the community center. Further erosion of the west bluff could destroy culturally important graves, a road, and residences. Further erosion of the east bluff could damage or destroy a road and residences. The community did not estimate or measure distance of buildings and roads from the bluff.

The BIA riprap along the airport road is the only coastal erosion protection measure employed at Nanwalek. Fill material is used to repair runway washout/erosion damage.

## **Photos and Diagrams**

No photos of erosion were provided by community or other sources. The attached diagram shows linear extent of erosion.

## **References**

*Alaska Community Erosion Survey*, OMB approved number **07100001**, expires September 30, 2009 completed by James Kvasnikoff, second chief of the Nanwalek IRA Council on August 20, 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)



Date of Aerial Photo: 3 June 05

**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



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