



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Savoonga, Alaska

Current as of November 2, 2007

Community Information

Savoonga (suh-VOON-guh), population 712, is on the northern coast of Saint Lawrence Island in the Bering Sea, 164 miles west of Nome and 39 miles southeast of Gambell. The community is incorporated as a 2nd class city within the unorganized borough. Boat, snowmachine and ATV ramps, boat storage, fishing, hunting, processing catch, beachcombing, cultural and social events, and driftwood collection are community activities using the shoreline of the bay.

Description of Erosion Problem

Savoonga reported coastal erosion from the Bering Sea. High tides, storm surges, wind, waves, melting permafrost, late-forming coastal ice, boat traffic, and vehicle and pedestrian traffic along the shoreline are reported causes and factors contributing to the erosion. The estimated erosion of the shoreline near the community is 1.7 to 2 feet per year. The erosion area is directly in front of the community and measures 80 feet horizontally and 30 to 35 feet vertically.

Erosion has been significant over the years, steadily washing away the bank of the shoreline. From 1972 to 2002, about 50 feet of bank eroded and was lost along Ishnuk Bay. Every fall and spring more soil is lost, and more rocks appear along the shoreline. This ongoing erosion has made the bank very steep (>45 degrees) and increasingly boulder-strewn, causing significant problems with boat launching and landing.

Potential Damages

Dwellings, a retail store, the main road, utility poles for power, telephone and cable, a clinic, a church, boat racks, teacher's quarters, and a commercial fish plant are structures threatened by the continuing coastal erosion. Some of these structures are estimated to be 150 feet or less from the eroding shoreline. The community anticipates all of those structures will be in danger of damage or loss due to erosion in the next 10 to 15 years. Because the old school was in severe danger, the community built a new school farther away from the shoreline. In the *Savoonga Strategic Development Plan for 2004-2009*, community development goal #3 is erosion control. There are no records of any flooding having occurred in Savoonga. According to the community, no attempts have been made to utilize erosion protection measures.

Photos and Diagrams

Photos of erosion provided by community and other sources are attached. A diagram showing the linear extent of erosion in the community is also attached.

References

Kawerak Inc. 2003. *Community Strategic Development Plan for Savoonga 2004-2009*, Prepared for Community of Savoonga and the Bering Strait Development Council by Kawerak, Inc.

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

USACE. 2002. *Savoonga: July 17, 2002, Site Visit*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2007. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 submitted via facsimile in September, 2007 and discussed further with Peggy Akeya, Savoonga city clerk, on November 2, 2007 and with Myron Kingeekuk, a council member, on November 7, 2007.

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: Savoonga Coastline, Nov. 2007.



Photo 2: Ishnuk Bay is in front of Native Village store, Nov. 2007.



Photo 3: Savoonga's beach has eroded inland 50 ft in 30 years; also changed from pebble gravel to boulders, Nov. 2007



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--- Linear Extent of Erosion



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