



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper – Aleknagik, Alaska

Current as of October 26, 2007

Community Information

Aleknagik (uh-LECK-nuh-gik), population 241, is at the head of Wood River on the southeast end of Lake Aleknagik, 16 miles northwest of Dillingham. The community is incorporated as a 2nd class city in the unorganized borough and is on Aleknagik Lake, but is divided by Wood River. Residents typically use the terms “north shore” and “south shore” to describe the 2 parts of the community. Different types of services are on each shore, but some services are duplicated to accommodate residents in each location. Aleknagik is at the edge of the nation’s largest state park; the 1.6 million acre Wood-Tikchik State Park and the Lake Aleknagik State Recreation Site. Boat, snowmachine and ATV ramps, barge access, boat storage, swimming, and fishing are community activities using the shoreline of Aleknagik Lake.

Description of Erosion Problem

Aleknagik experiences periodic episodes of erosion, typically associated with spring flooding or fall storm events, which occur at least twice per decade. There was a damaging flood in the spring of 1996 and a severe fall storm in October 2006. Fall storms and spring breakup combined with increased waves from westerly winds on Aleknagik Lake can cause erosion. Erosion can also be caused by boat wakes, even though the Wood-Tikchik State Park has no-wake zones along the south and north shores. There is a boat ramp at the recreation site by the city dock that experiences erosion from boat traffic. That erosion area is approximately 200 feet long and 10 feet high. The boat storage area by the city dock had significant erosion during the October 2006 storm, which threatened the safety of the boats.

Potential Damages

Floating docks, bank stabilization structures, stairs, pilings, and anchoring devices are small developments below ordinary high water on the south shore. Some utility poles and power lines are potentially in danger. These structures are less than 100 feet from the erosion area.

One hundred cubic yards of gravel were added to the city’s boat storage area to help repair erosion damage. Additional large rock has since been added to the staging area behind the dock to help stabilize the shore. Generally, bank protection and restoration measures have been used in areas where active bank erosion was occurring or where potential erosion may occur and jeopardize land and/or structures. No information on costs was provided.

The *Wood-Tikchik State Park Management Plan*, prepared by the state in 2002, describes some south and north shore developments and identified facilities on the north shore that may be at risk from erosion. These developments include Moody's boat and floatplane servicing facility and a

dock facility owned by the city. The *Plan* also identified general erosion protection measures that could be employed in these areas.

Photos and Diagrams

Photos of erosion provided by the Aleknagik city administrator are attached. Also, attached is a diagram depicting the linear extent of erosion near the city dock.

References

Aleknagik Tribal Council. 2005. *Aleknagik Community Comprehensive Plan*. Developed by Aleknagik City Council, Aleknagik Tribal Council, Aleknagik Natives Limited, and the residents of Aleknagik.

SOA, DPOR. 2002. *Wood-Tikchik State Park Management Plan*. Prepared by State of Alaska, Division of Parks and Outdoor Recreation. Available online at:

<http://www.dnr.state.ak.us/parks/plans/woodt/wtplan1mb.pdf>

Various. 2005. *Aleknagik Community Comprehensive Plan*. Developed jointly by Aleknagik City Council.

USACE. 2007. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Patty Heyano, Aleknagik City Administrator on October 25, 2007 and a facsimile copy sent to the USACE on September 28, 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: Aleknagik city dock, October 2006.



Photo 2: Aleknagik city dock after October storm but before city replaced fill, October 2006.



WOOD RIVER

LAKE ALEKNAGIK

City dock erosion

Flow



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--- Linear Extent of Erosion



Alaska Baseline Erosion
Aleknagik, Alaska