



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper – Port Lions, Alaska

Current as of March 18, 2008

Community Information

Port Lions, population 179, is in Settler Cove near the mouth of Kizhuyak Bay, on the north coast of Kodiak Island, about 19 miles west-northwest of the city of Kodiak, and 247 miles southwest of Anchorage. The community was founded in 1964 for the displaced inhabitants of Afognak, which was destroyed by the 1964 earthquake and tsunami. The beach is used for beachcombing and collecting driftwood.

Description of Erosion Problem

The shoreline is eroding adjacent to Settler Cove in the Port Wakefield subdivision of the community. Storm surges, high tides, and wind-driven waves reportedly cause and contribute to erosion. The shoreline is being undercut, and the undercut areas drop into the cove. A 2005 Corps *Navigation Improvements Feasibility Report* stated that east and southeast waves impact the Port Wakefield area. The eroding shoreline area was reported at 5 to 7 feet high and approximately 1 mile long with the rate of erosion around 3 feet per year.

Potential Damages

Houses, outbuildings, drying racks and smoke houses are threatened. The water reservoir dam, community center, Peregrebni Peninsula, Kizhuyak Drive area, and the area near the shoreline in the upper Settler Cove area are eroding. Aerial photography shows 500 feet of revetment along the coastline adjacent to the airport. A 2003 *Port Lions Airport Master Plan Scoping Report* did not indicate the airport was threatened by erosion. The eroding area in the Port Wakefield subdivision includes the backyards of the lots and beach area along Settler Cove. The houses built in this area are more than 100 feet from the shoreline.

No formal shoreline protection measures have been employed except for the revetment at the airport. Landowners have piled trees, branches, and gravel along the shoreline to reduce the rate of erosion. The June 2003 *Port Lions Comprehensive Community Plan* included the following proposals related to erosion: identify the river and beach areas at high risk to erosion; develop a local ordinance for erosion control; research methods for erosion control appropriate to Port Lions area; plant foliage (beach grasses) along banks; post a sign asking people to stop taking gravel off the boat ramp beach; and build a staircase to beach and river edges to reduce multiple foot trails which increase the possibility of erosion. The 2006 *Port Lions Hazard Mitigation Plan* lists erosion protection as a priority for the community.

Photos and Diagrams

A photo of the Port Lions causeway obtained from the Native Village of Port Lions website is attached. Also, attached is a diagram depicting the linear extent of erosion.

References

AK DOT/PF. 2003. *Port Lions Airport Master Plan Scoping Report*. Prepared by HDR Alaska Inc. for the Alaska Department of Transportation and Public Facilities.

DOWL Engineers. 1981. *City of Port Lions, Community Profile*. Prepared by DOWL Engineers for the Department of Community and Regional Affairs.

KIB. 2006. *Hazard Mitigation Plan Annex City of Port Lions Draft*. Prepared by Duane Dvorak, Kodiak Island Borough Community Development Department and Port Lions.

KIHA. 2003. *Port Lions Comprehensive Community Plan*. Prepared with assistance by Kodiak Island Housing Authority and Alisha Drabek.

Native Village of Port Lions. 2008. website: <http://portlions.net/pictures.php>

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

USACE. 2005. *Navigation Improvements Final Interim Feasibility Report and Environmental Assessment Port Lions, Alaska*. Alaska District, U.S. Army Corps of Engineers.

USACE. 2008. *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Lorna Maughan, the City of Port Lions Clerk, on March 18, 2008.

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: Port Lions causeway across Settler Cove. Photo courtesy of Native Village of Port Lions, No photo date available.



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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