



U.S. Army Corps
of Engineers
Alaska District

ALASKA BASELINE EROSION ASSESSMENT

Erosion Information Paper - Manley Hot Springs, Alaska

Current as of February 4, 2008

Community Information

Manley Hot Springs (MAN-lee), population 78, is located about 5 miles north of the Tanana River on Hot Springs Slough at the end of the Elliott Highway, 160 road miles west of Fairbanks. The community is unincorporated and within the unorganized borough. The following information on erosion was obtained through telephone interviews and completion of an OMB Community Erosion Survey with the president of the Manley Hot Springs Community Association in February 2008.

Description of Erosion Problem

In the erosion survey the community reported there are no erosion problem areas along Hot Springs Slough and the only significant erosion occurs periodically at the end of the Elliott Highway where it terminates at the Tanana River, approximately 3 miles south of the community development. Conditions causing and contributing to the erosion include seasonal fluctuations in river flows and water levels, and ice movements associated with spring break up. It was estimated by the community that the length of the area eroding at the end of the highway is approximately 10,000 feet long and the bank is approximately 10 feet high. No major erosion events were reported to have occurred in the last 20 years. The erosion was described as ongoing at an estimated rate of 20 feet a year inland.

The community reported that flooding in the community, with associated erosion, primarily caused by periodic ice jams and over-bank flows is predicted to occur every 20 to 40 years. During those floods, the airport and 10 to 15 homes are usually flooded. The worst flood occurred in 1967, caused by heavy rains. The water rose 6 feet and flooded 20 houses and the airport. Another report stated that the town flooded about every 5 years, with the highest flood occurring in 1956, caused by ice jams. In the community, the power house, post office, Manley Roadhouse, most homes, and the lower end of the airstrip are reported to be in the 100-year flood plain.

Potential Damages

The end of the highway is used for community activities such as barge access to the Tanana River, snowmachine access to the river in the winter, a vehicle parking and turn around area, and launching boats. There are no structures located at the end of the highway, and the only potential damage is to the end of the roadway itself. According to the community survey respondent, there

are no significant erosion risks. No erosion protection measures have been installed in the community.

Photos and Diagrams

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

References

USACE. 1992. *Community Information Form: Manley Hot Springs.* Alaska District, U.S. Army Corps of Engineers.

USACE. 1994. *High Water Elevation Identification: Manley Hot Springs.* Alaska District, U.S. Army Corps of Engineers.

USACE. 2008. *Alaska Community Erosion Survey, OMB approved number 07100001,* expires September 30, 2009 administered to Robert E. Lee, president Manley Hot Springs Community Association, on February 4, 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



Date of Aerial Photo: 21 September 02



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Civil Works Branch

--- Linear Extent of Erosion



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