

### ALASKA BASELINE EROSION ASSESSMENT

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

Current as of February 9, 2009

## **Community Information**

Kiana (kai-ANN-uh), population 401, is on the north bank of the Kobuk River 57 miles east of Kotzebue. The community is incorporated as a 2nd class city in the Northwest Arctic Borough. The bank of the Kobuk River is primarily used for barge access.

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

The Squirrel River flows into the Kobuk River at Kiana. The community is eroded along the Kobuk River during periodic fluctuations in river flow and water levels, melting permafrost, ice jams, and storm water runoff. Several areas in the city limits have erosion problems on the Kobuk River. Erosion is reported as gradual. An estimated annual erosion rate is unavailable.

The community stated that during fall 2007 or fall 2008 one of the boulders placed by the barge landing to prevent erosion was dislodged when someone was off-loading heavy equipment, since then erosion has occurred behind the dislodged boulder and is threatening the others. In addition during spring thaws, erosion takes place near the landfill, which is also near the sewage lagoon.

#### **Potential Damages**

The sewage lagoon, cemetery, dock, and airport runway are 100 to 500 feet from the riverbank. City staff buried logs and planted trees and willows as an erosion protection measure for the cemetery. Large boulders were placed to protect the barge landing dock area. These measures are reportedly inadequate.

#### **Photos and Diagrams**

Photo of erosion provided by the community is attached. A diagram depicting the linear extent of erosion is also attached.

#### References

**USACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Delores Tuckfield, executive director of City of Kiana and the native village of Kiana, on February 26, 2008.

#### **Additional Information**

This information paper, as well as those for other communities, can be accessed on the internet at <a href="https://www.alaskaerosion.com">www.alaskaerosion.com</a>. For more information please contact the Corps of Engineers, project manager at (907) 753-5694 or email <a href="https://www.alaskaerosion.POA@usace.army.mil">Alaska.Erosion.POA@usace.army.mil</a>



Photo 1: Kiana has had problems with a breaching of the sewage lagoon, August 29, 2007.





Alaska District Corps of Engineers Civil Works Branch

--- Linear Extent of Erosion





Alaska Baseline Erosion

Kiana, Alaska