



U.S. Army Corps  
of Engineers  
Alaska District

## **ALASKA BASELINE EROSION ASSESSMENT**

# **Erosion Information Paper - Nunam Iqua (Sheldon Point), Alaska**

Current as of February 17, 2009

### **Community Information**

Nunam Iqua (NOO-nam ICK-wa), formerly Sheldon Point, population 201, is on a south fork of the Yukon River, about 9 miles south of Alakanuk in the Yukon River Delta. It is 18 miles southwest of Emmonak, and 500 miles northwest of Anchorage. Nunam Iqua is incorporated as a 2nd class city in the unorganized borough.

### **Description of Erosion Problem**

Nunam Iqua is on a point of land subject to erosion on three sides by the Yukon River, Kwemeluk Pass, and the Bering Sea. Coastal storm surges, high winds (often in excess of 60 miles per hour), ice pushed ashore in the fall, spring break up, melting permafrost, and boat wakes reportedly cause and contribute to erosion. Based on the 2007 *Nunam Iqua Draft Hazard Mitigation Plan*, erosion along the shoreline totals approximately 16,500 feet, about 8,750 feet on Department of Transportation and Public Facilities (DOT/PF) property, and about 7,750 feet on city land. Bank height ranges from 5.5 feet to 8 feet.

The 2007 DOT/PF report notes that grass assemblages on the river bank substantially affect vulnerability to erosion. Areas with more homogeneous grasses tend to be more stable than areas where vegetation is more varied. The small sloughs emptying into Kwemeluk Pass have increased erosion and silt build-up on the nearby riverbanks. DOT/PF prepared a map (attached) that compares the shorelines in 2001 to the shorelines in 1951.

### **Potential Damages**

Active erosion is occurring less than 100 feet from the community water intake pump. Other structures and facilities between 100 and 500 feet from erosion include some homes, water lines, food storage areas, drying racks, smoke houses, public buildings, the marine header, fuel dispenser, tank farm, the airport runway and airport facilities. The city has an FEMA approved *Hazard Mitigation Plan* for the community. The Northern Commercial Company and Alaska Commercial Company had a store in Nunam Iqua that was destroyed by erosion.

### **Photos and Diagrams**

A map prepared by DOT/PF that compares shorelines between 1951 and 2001 is attached. Also, attached is a diagram depicting the linear extent of erosion in the community.

## References

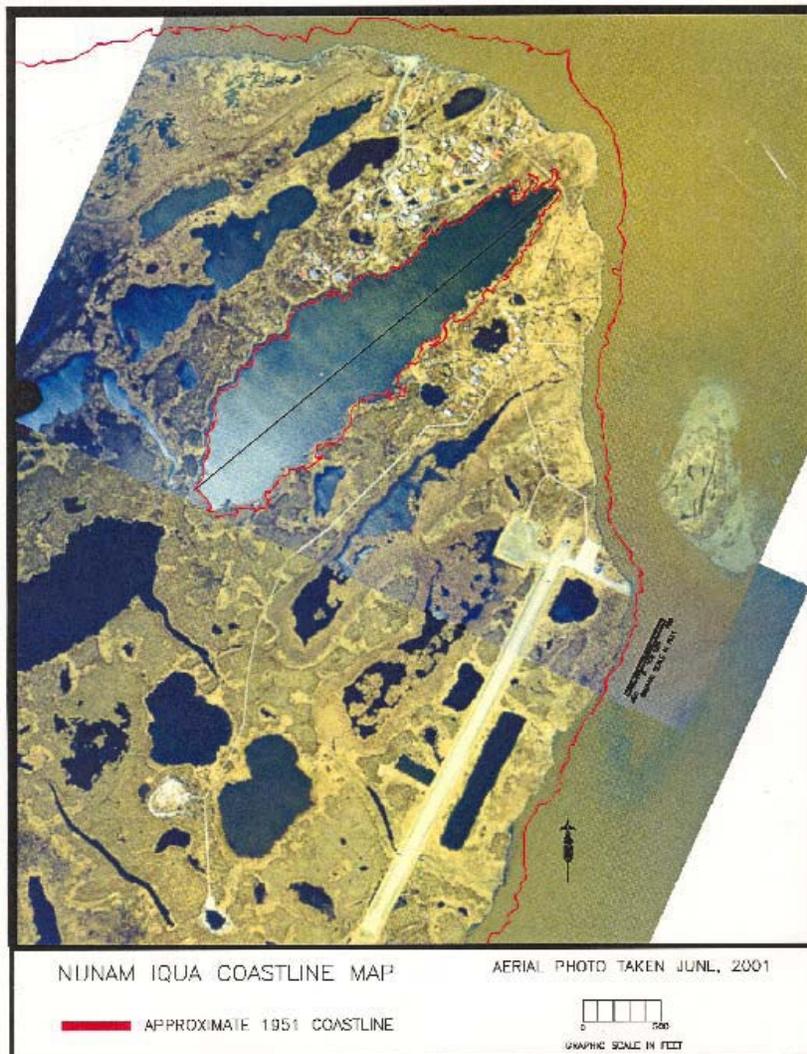
**City of Nunam Iqua. 2008.** *Hazard Mitigation Plan.* City of Nunam Iqua.

**USACE. 2008.** *Alaska Community Erosion Survey, OMB approved number 07100001*, expires September 30, 2009 administered to Carin Finch, advisor to city of Nunam Iqua and village corporation land planner, on March 4, 2008.

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## Additional Information

This information paper, as well as those for other communities, can be accessed on the internet at [www.alaskaerosion.com](http://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](mailto:Alaska.Erosion.POA@usace.army.mil)



**Photo 1: Location of shoreline in 2001 aerial photo compared to approximate 1951 (redline) location, from Appendix F of the *Nunam Iqua Hazard Mitigation Plan*; map prepared by DOT/PF.**



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--- Linear Extent of Erosion



Alaska Baseline Erosion  
Nunam Iqua, Alaska