

## ALASKA BASELINE EROSION ASSESSMENT

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

Current as of November 15, 2007

## **Community Information**

Ouzinkie (you-ZINK-ee), population 193, is in the Gulf of Alaska on the southwest coast of Spruce Island and is separated from Kodiak Island by Narrow Strait. It is northwest of the City of Kodiak, 247 miles southwest of Anchorage. The community is incorporated as a 2nd class city in the Kodiak Island Borough. The shoreline is used for numerous community activities, including boat and ATV ramps, barge access, fishing, hunting, processing catch, beachcombing, cultural/social events and driftwood collecting.

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

The erosion survey reports that Ouzinkie is affected by ongoing shoreline and bluff erosion that is a combination of wave undercutting at the toe of the bluff and shallow surface slides on the upper slopes. The bluff is approximately 25 feet high. According to a 1983 *Ouzinkie Erosion Study*, the bluff is eroding at a rate of about 1 foot per year. The study reports that wave action, surface water runoff, soil fluctuation, and disruption of the natural vegetation are causes of and contributors to the erosion. The erosion survey indicated that localized surface erosion occurs, to a lesser extent, in the community due to runoff and human activity.

The 1964 earthquake and resulting tsunami destroyed the Ouzinkie Packing Company Cannery and caused the general subsidence in the region of about 5 to 6 feet. Columbia Ward bought the remains of the cannery and rebuilt the store and dock. A 1980 storm coupled with high tides caused damages to the harbor and boardwalks. The Governor of Alaska requested that the area be declared a Federal disaster as a result of the 1980 storm damages.

#### **Potential Damages**

The 1983 *Ouzinkie Erosion Study* reported that shoreline and bluff erosion was threatening to destroy the city's boardwalks and could eventually undermine the cemetery, the Russian Orthodox Church, and some residential structures. In 2004, the community was hit by heavy rains and erosion took out a portion of the community boardwalk and wave wall. The wave wall is a 4-foot high wooden wall that originally cost about \$35,000. Ouzinkie received about \$16,000 from the Federal Emergency Management Agency for repairs to the wave wall and boardwalks. The tribal administrator remarked that had it not been for the wave wall, the boardwalk, church, graveyard, and several homes would have been lost. According to the community survey, erosion is ongoing, and the wave wall is seasonally battered. At times, the wave wall is all that prevents extensive erosion losses.

According to the tribal administrator, structures and facilities that continue to be threatened by erosion include: (1) 2 houses on the eastside and the cemetery are approximately 25 feet from high tide line to the shoreward edge and (2) the church, roads including 2nd Street and Front Street, the boardwalks, wave wall, and the west end of the airport runaway are where erosion loss has been estimated at 40-45 feet since 1992. Two sites of historical and traditional importance outside the city limits are threatened by erosion. These include an area west of the village and Monk's Lagoon, an ancient village site with an old church.

The 1983 erosion study offered a number of recommendations for erosion-control measures that could accompany any specific structural and non-structural measures. Regulating foot traffic along the shoreline, prohibiting the hauling of firewood over the slopes, maintaining and frequently inspecting the city's sewer outfall system, and prohibiting future construction along the top of the bluffs was recommended.

### **Photos and Diagrams**

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

#### References

**Norgaard Consultants. 1984.** *Kodiak Island Borough Comprehensive Development Plan.* Prepared for Kodiak Island Borough.

**Tetra Tech Inc. 1983.** *Final Report, Ouzinkie Erosion Study*, prepared for the State of Alaska, Department of Transportation and Public Facilities (Agreement No. 82CW014).

**USACE. 2007.** Alaska Community Erosion Survey, OMB approved number 07100001, expires September 30, 2009 administered to Robert Katelnikoff, Ouzinkie tribal administrator on November 15, 2007 and Linda Getz, City of Ouzinkie clerk on November 11, 2007.

#### **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.eom">Alaska.Erosion.POA@usace.army.mil</a>



Photo 1: Ouzinkie harbor, August 2007



Photo 3: Ouzinkie & the harbor from air, August 2007.



Picture of Ouzinkie and boat harbor taken from airplane

Photo 2: Ouzinkie & small boat harbor, no photo date available.



Photo 4: Ouzinkie from the air, no photo date available.

