



U.S. Army Corps  
of Engineers  
Alaska District

## ***ALASKA BASELINE EROSION ASSESSMENT***

### **Erosion Information Paper – King Cove, Alaska**

Current as of November 6, 2007

#### **Community Information**

King Cove, population 807, is on the south side of the Alaska Peninsula in the north Pacific Ocean, on a sand spit fronting Deer Passage and Deer Island. The community is 18 miles southeast of Cold Bay and 625 miles southwest of Anchorage. King Cove is a 1st class city in the Aleutians East Borough.

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

According to the community survey, the main erosion problem is coastal erosion. Causes and contributing factors to coastal erosion are storm surge, high wind and waves.

In the community survey the city manager reported that high wind and waves occur several times per year, but they have not resulted in any structural damage to buildings. During a February 2007 storm, water lapped over boardwalks and spray occasionally hit the front row of homes, but no threats to structures were identified.

#### **Potential Damages**

The road along Gould's Lagoon connects residents living in old Ram and new Ram subdivisions (about 2/3 of the residents) with those living on the spit, near the Peter Pan Seafood plant. Residents on the spit also use the road to evacuate in the event of a tsunami threat. This road is the only infrastructure threatened.

Approximately ½ mile of road along Gould's Lagoon is armored to protect it from coastal erosion. The city plans to place additional large armor rock to further stabilize this road during summer 2008. The main road to the small boat harbor has washed out during high tides in the past. The road was repaired and part was relocated approximately 20 feet inland. The main road is currently not a problem and the road along Gould's Lagoon is not at serious risk from erosion or in imminent risk of failure. According to the city manager, King Cove roads have been or will be upgraded to a 50-year flood design standard. The city plans to pave all roads during summer 2008.

#### **Photos and Diagrams**

Attached photos were provided by the City of King Cove. A diagram depicting approximate areas of past erosion problems is also attached.

## References

USACE. 2007. *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 administered to Gary Hennigh, King Cove city manager on October 12, 2007.

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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: King Cove, October 2005.**



**Photo 2: Ram's Creek culverts planned for replacement with open span bridge in 2008, October 2005.**



**Photo 3: King Cove Bridge, October 2005.**



**Photo 4: King Cove Bridge provides access across King Cove Lagoon inlet to the spit, October 2005.**



*KING COVE*

Ram's Creek culvert scheduled for  
open span bridge replacement in 2008

Date of Aerial Photo: 25 May 06

**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



Alaska District  
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--- Linear Extent of Erosion  
Part 1



Alaska Baseline Erosion  
King Cove, Alaska



*KING COVE*

Peter Pan Seafood

Boardwalk has been overtopped but  
no significant erosion damage

*GOULD LAGOON*

Riprap placed along road

Date of Aerial Photo: 25 May 06

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--- Linear Extent of Erosion  
Part 2



Alaska Baseline Erosion  
King Cove, Alaska