



U.S. Army Corps  
of Engineers  
Alaska District

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

# **Erosion Information Paper – Municipality of Anchorage, Alaska**

Current as of October 10, 2007

### **Community Information**

The Municipality of Anchorage (MOA) contains the communities of Anchorage, population 282,813. The Municipality included a number of communities. Among them are: Eagle River and Chugiak. The MOA – the most populated unified home rule municipality in Alaska – is in southcentral Alaska, at the head of Cook Inlet. The communities of Eagle River and Chugiak are northeast of Anchorage along the Glenn Highway. The MOA also includes Birchwood, Peters Creek, Thunderbird Falls and Eklutna.

### **Description of Erosion Problem**

Erosion in Anchorage and Eagle River occurs primarily as a result of natural riverine processes and human activities within the watersheds, increasing direct runoff. Stream flow, flood events, spring breakup and snowmelt, tree-fall diverting the flow of small creeks and streams; human uses of banks and waterway corridors; and urban development are causes and contributing factors to erosion. Erosion in Anchorage and Eagle River are (a) Furrow Creek in south Anchorage is head-cutting downstream of Johns Road; (b) Campbell Creek has multiple areas where erosion and bank are weakening due to human activity; (c) Little Rabbit Creek has 1 residence threatened by erosion; (d) Meadow Creek in Eagle River has erosion from human encroachment and natural stream velocity along the narrow and steep stream corridor; (e) at mile 34 Eagle River Road, has slumping due to erosion of unstable soil and mile 6 has slow erosion along the bank; and (f) Peter's Creek has erosion caused by aufeis (winter icing), and in an area of the creek in the Peter's Creek Park area, where the creek has migrated.

### **Potential Damages**

Erosion on Furrow Creek does not pose a threat to any structures. Driveways, road crossings, yards and fences, and portions of the creek confined to ditches (e.g., below Seward Highway) encroach upon the small urban stream. Erosion along roads and culverts periodically occurs, but these areas are repaired as needed following heavy runoff events.

Potential damages in the multiple erosion areas along Campbell Creek are (1) a parking lot and chain link fence in the vicinity of 57<sup>th</sup> Avenue and the Old Seward Highway; (2) the bike path behind the Sourdough Mining Company (3) the Minnesota Road bridge bike bath and (4) a home along Little Rabbit Creek is less than 10 feet from the creek.

At Wickersham Park and Dimond Drive, electrical poles and gas line were relocated to prevent loss from erosion. The Meadow Creek Subdivision on Meadow Creek in Eagle River was platted with lot lines encroaching on and crossing the stream corridor in many locations. Meadow Creek between Eagle River Loop Road and Old Glenn Highway has eroded within 15 feet of several homes in the Meadow Creek Subdivision.

According to the local floodplain administrator, various attempts made by homeowners to provide protection against erosion have not been in-place long enough to be assessed for effectiveness.

### **Photos and Diagrams**

Photos of erosion provided by the MOA watershed management division are attached. The attached diagram depicts the linear extent of erosion along Meadow Creek in Eagle River.

### **References**

**USACE. 2007.** *Alaska Community Erosion Survey*, OMB approved number 07100001, expires September 30, 2009 administered to Jeff Urbanus and Jack Puff , MOA, watershed management section, on August 29, 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: Meadow Creek, no date.**



Date of Aerial Photo: 25 September 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



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--- Linear Extent of Erosion



Alaska Baseline Erosion  
Eagle River, Alaska