

Kenai Peninsula Borough  
Seward Bear Creek Flood Service Area

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**MEMORANDUM**

**To:** Wayne Ogle, Assembly President  
Members, Kenai Peninsula Borough Assembly

**Thru:** Charlie Pierce, Mayor *CP*  
Brandi Harbaugh, Finance Director *BHS*  
John Hedges, Purchasing & Contracting Director *JH*  
Dan Nelson, Emergency Manager *DN*

**From:** Stephanie Presley, Seward/Bear Creek Flood Service Area  
Program Lead *SP*

**Date:** August 22, 2019

**Subject:** Ordinance 2019-19- 10, Appropriating \$75,000 from the Seward  
Bear Creek Flood Service Area Fund Balance to Complete  
Sediment Management in Kwechak Creek (Mayor)

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The Northwest Hydraulic Consultants (NHC) 2007 study of sedimentation trends on Salmon Creek found two major sediment deposition areas. The first, at the confluence of Lost Creek and Kwechak Creek, within the Questwoods neighborhood, covers 55 acres with significantly deeper deposits near the middle of the streambed. The volume of sediment that had accumulated at this site in the 30 years prior to the report was estimated at 370,000 cubic yards. The average rate of accumulation was found to be approximately 12,500 cubic yards per year and the average rise in ground levels (assuming even deposition over the area) was 1.7 inches per year.

Since the NHC report, the community of Seward has experienced three flood events with large volumes of sediment transported during the 2012 and 2018 events. In the 2012 event, enough material was deposited at this site that the flows from Lost Creek no longer enter Kwechak Creek and waters ran in channels adjacent to the Alaska Railroad. During the October 2018 event, these flows overtopped the railroad tracks and the Seward Highway risking closure of these primary access routes.

Removal of streambed materials from strategic locations improves conveyance of floodwaters and provides a catch basin for debris transported

during high water events, decreasing the deposition of sediments in downstream areas. Due to the large volumes of material accumulated, the ease of access for heavy equipment, and cooperation with private property owners, this deposition area has been selected as a regular sediment management site. Periodic maintenance will reactivate the main Kwechak Creek channel, direct floodwaters away from the railroad and highway, and protect private and public infrastructure. A project plan has been drafted and the required permits and private property owner agreements have been obtained by Seward Bear Creek Flood Service Area (SBCFSA).

A sediment removal project plan has been drafted and the required permits and private property owner agreements have been obtained by SBCFSA. The project is ready to go out to contractors for bids. The scope of work will be bid per cubic yard to remove the maximum amount of streambed load as possible from this critical area.

At the July 1, 2019 regular meeting, the SBCFSA board of directors unanimously recommended approval of \$75,000 from fund balance to complete a sediment management project in Kwechak Creek.

Your consideration of this ordinance is appreciated.

FINANCE DEPARTMENT ACCOUNT / FUNDS VERIFIED	
Acct. No.	<u>259.00000.00000.27910</u>
Amount:	<u>\$75,000.00</u>
By: <u>pp</u>	Date: <u>8/22/19</u>