



**DEPARTMENT OF THE ARMY**  
**ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
**P.O. BOX 6898**  
**JOINT BASE ELMENDORF-RICHARDSON, AK 99506-0898**

Douglass Cooper  
Conservation Planning Assistance  
Anchorage Fish & Wildlife Field Office  
4700 BLM Road  
Anchorage, AK 99507

Dear Mr. Cooper,

The U.S. Army Corps of Engineers (USACE) respectfully requests your formal collaboration under the Fish and Wildlife Coordination Act in the identification, characterization, or development of either alternatives or mitigation strategies associated with a USACE feasibility assessment of potential flood control measures located at Lowell Creek, Seward, Alaska.

USACE's feasibility study is being conducted under authority granted by Section 5032 of the Water Resources Development Act of 2007 (P.L. 110-114):

*SEC. 5032. LOWELL CREEK TUNNEL, SEWARD, ALASKA.*

*(a) LONG-TERM MAINTENANCE AND REPAIR.-*

*(1) MAINTENANCE AND REPAIR.-The Secretary shall assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel, Seward, Alaska.*

*(2) DURATION OF RESPONSIBILITIES.-The responsibility of the Secretary for long-term maintenance and repair of the tunnel shall continue until an alternative method of flood diversion is constructed and operational under this section, or 15 years after the date of enactment of this Act, whichever is earlier.*

*(b) STUDY.-The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible.*

*(c) CONSTRUCTION-*

*(1) ALTERNATIVE METHODS.-If the Secretary determines under the study conducted under subsection (b) that an alternative method of flood diversion in Lowell Canyon is feasible, the Secretary shall carry out the alternative method.*

*(2) FEDERAL SHARE.-The Federal share of the cost of carrying out an alternative method under paragraph (1) shall be the same as the Federal share of the cost of the construction of the Lowell Creek tunnel.*

Implementation Guidance provided by HQUSACE for Section 5032 states that the feasibility study should be conducted in accordance with current budgetary policy and procedural guidance contained in ER 1105-2-100, USACE's Planning Guidance Notebook, for projects authorized without a report.

Because construction authority is included in Section 5032, the final product of this study will be a Report of the Director of Civil Works.

Lowell Creek's existing flood control structure is comprised of an elevated spillway diversion and 2,068 foot-long concrete-lined, steel rail reinforced tunnel running southeast through Bear Mountain where the entirety of Lowell Creek's surface waters are diverted and discharged via elevated spillway, subsequently flowing beneath Lowell Point Bridge, and into Resurrection Bay. These structures were constructed between 1939 and 1940 by USACE , and are not thought to be capable of mitigating the watershed probable maximum flood or a catastrophic failure due to tunnel blockage, greatly endangering the residents of Lowell Creek's historic channel. Similarly, Lowell Creek poses a persistent flood risk to nearby infrastructure at its outfall terminus due to its predisposition to rapidly accrete debris and overtop Lowell Point Bridge. Due to its steep-walled, sparsely vegetated , talus-strewn watershed, Lowell Creek produces significant quantities of rock and boulder debris during peak flow conditions, once generating an estimated 10,000 cubic yards in an 11-hour timeframe (Stauffer 2010). Lowell Creek' s historic alluvial deposition constitutes a large portion of the landmass that the town of Seward is built upon , and its relative rate of deposition is readily apparent when viewing sequential timeline satellite or aerial photographs of the existing outfall terminus.

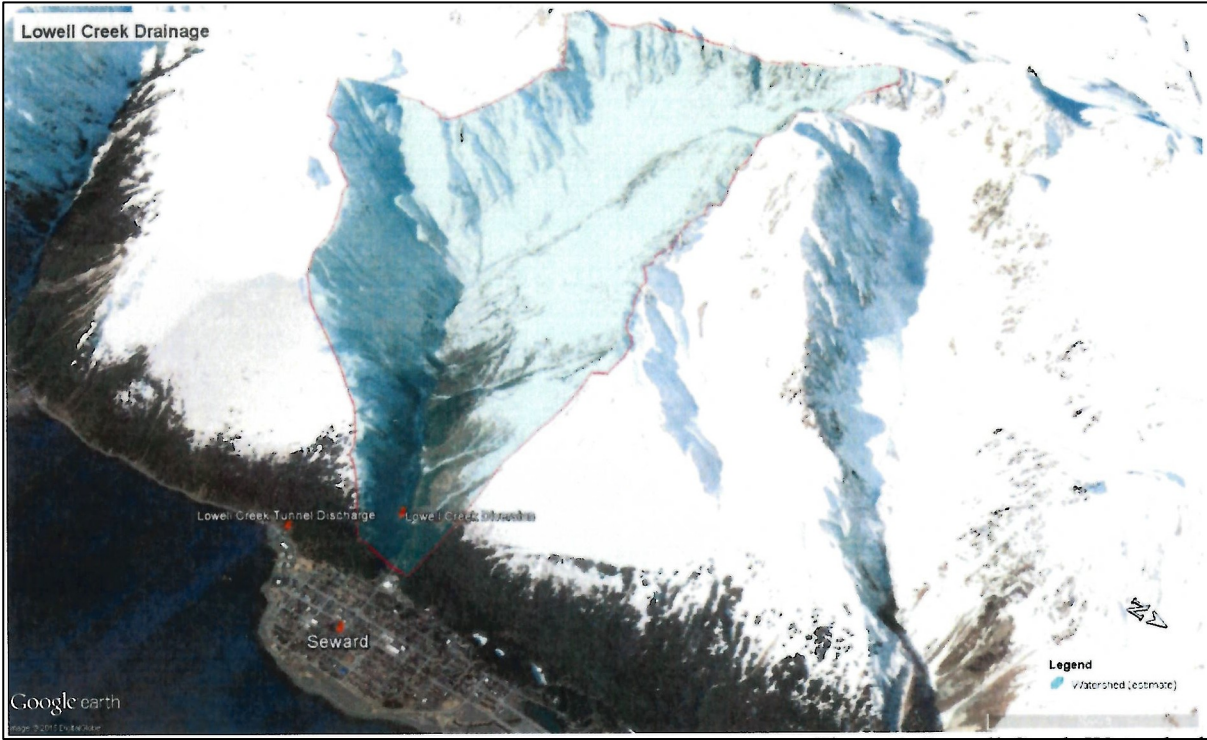


Figure 1. Lowell Creek Watershed



Figure 2. Existing Lowell Creek outfall terminus

In 2016, USACE developed an Environmental Analysis and subsequently issued a Finding of No Significant Impact for maintenance actions necessary to the longevity of the existing Lowell Creek flood control structures. Maintenance actions were conducted in mid-winter to avoid surface flows that might preclude repair actions. Due to the project footprint (the majority of work occurring within the Lowell Creek Tunnel, and previously disturbed and paved areas used as laydown sites), the type of work being conducted, and specific timing of the repair actions, impacts to threatened and endangered species, bald and golden eagles, and migratory birds were not reasonably expected to occur. Similarly, downstream effects of such work were negligible and were not anticipated to impact anadromous waters, essential fish habitat, marine mammals, or threatened or endangered species and their respective critical habitats.

Currently, USACE is evaluating the efficacy of a suite of alternatives that address a watershed probable maximum flood scenario that include the creation of a second, larger tunnel, upstream of the existing tunnel structure; increasing the existing tunnel diameter; increasing the height and length of the existing spillway structure; or a combination of all alternatives. Potential impacts to the natural environment as a result of this project are not anticipated to be significant. However, USACE intends to implement reasonable mitigation measures that further negate perceived impacts to natural systems and the species that utilize them.

USACE believes that two of these potential alternatives, increasing the diameter of the existing tunnel and creation of a second tunnel, will generate a volume of granitic rubble that will likely have to be disposed of in the waters of the adjacent Resurrection Bay. These volumes of debris would be quantified in the few

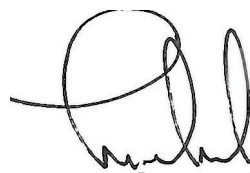
tens of thousands of cubic yards, and pale in comparison to Lowell Creek's natural capacity to generate sediment. Similarly, there exists the potential for vegetation clearing in the lower Lowell Creek Watershed, but this is not expected to be excessive.

Under its NEPA and project planning guidance, USACE is currently preparing an Environmental Assessment for this feasibility assessment and seeks to include USFWS coordination in the identification, characterization, or development of either alternatives or mitigation strategies. Precision data and schematics of proposed alternatives do not exist at this stage of the project development process. However, USACE is resolved to share all existing and pertinent data related to the Lowell Creek flood control feasibility assessment with USFWS in the spirit of satisfying the precepts of the Fish and Wildlife Coordination Act.

Please direct any questions or considerations that you may have to Mr. Michael Rouse, Fisheries Biologist/ NEPA Coordinator, U.S. Army Corps of Engineers, Alaska District, 907-753-2743, or at [Michael.B.Rouse@usace.army.mil](mailto:Michael.B.Rouse@usace.army.mil)

#### References

Stauffer, C., 2010. Learning To Live With Water: A History of Flooding in Seward, Alaska. 1903-2009. Seward/Bear Creek Flood Service Area.



Michael Rouse  
Fisheries Biologist/ NEPA Coordinator  
U.S. Army Corps of Engineers



United States Department of the Interior  
U.S. FISH AND WILDLIFE SERVICE  
Anchorage Fish and Wildlife Conservation Office  
4700 BLM Road  
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IN REPLY REFER TO:  
FWS/IR11/AFES/AFWCO

January 21, 2020

Mr. Mike Rouse  
U.S. Army Corps of Engineers  
P.O. Box 6898  
Joint Base Elmendorf-Richardson, Alaska 99506

Subject: Lowell Creek Flood Diversion Structure Seward, Alaska  
(Consultation #07CAAN00-2017-CPA-0011)

Dear Mr. Rouse:

Thank you for requesting input from the U.S. Fish and Wildlife Service (Service), pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) on the Lowell Creek Flood Diversion Structure Project. The Service has reviewed the project and has no objections at this time. Due to limited expected impacts on trust resources, we will not pursue further investigation or a report under the Fish and Wildlife Coordination Act Report. The Service could become more actively engaged in this project should project features be modified, or environmental conditions change so that impacts become more severe than currently anticipated.

Thank you for the opportunity to participate in the project and we look forward to working with you in the future. If you have any questions please contact Ms. Jennifer Spegon at 907-271-2768 or via email at [Jennifer\\_J\\_Spegon@fws.gov](mailto:Jennifer_J_Spegon@fws.gov) and refer to consultation number 07CAAN00-2017-CPA-0011.

Sincerely,

Douglass M. Cooper  
Branch Chief, Ecological Service