
LOWELL CREEK FLOOD DIVERSION STUDY APPENDIX I: FINDING OF NO SIGNIFICANT IMPACT (FONSI) SEWARD, ALASKA



SEPTEMBER 2020



**U.S. Army
Corps of
Engineers**
Alaska District

FINDING OF NO SIGNIFICANT IMPACT
General Investigation Study, Lowell Creek Flood
Diversion Seward, Alaska

The U.S. Army Corps of Engineers, Alaska District (Corps) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The Final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated XXXX, for the General Investigation Study at Seward, Alaska, addresses flood diversion improvement opportunities and feasibility at the Lowell Creek diversion structure in Seward, Alaska. The final recommendation is contained in the Director’s Report, dated XXXX.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would reduce flood risk in the study area. The recommended plan is Alternative 4a and includes:

- A new flood control diversion system consisting of a diversion dam, tunnel entrance invert, 18-foot diameter horseshoe tunnel, and elevated 150-foot outfall flume, located upstream of Lowell Creek’s existing diversion structure which was originally installed by the Corps in the 1930s.

In addition to a “no action” alternative, six alternatives were evaluated.¹ The alternatives included the refurbishment of the existing diversion system, increased diameter tunnels at the existing diversion system, new diversion systems of varying size upstream of the existing diversion system, and a debris catchment basin upstream of the existing diversion system. The suite of alternatives that were evaluated integrated non-structural components, which increased each alternative’s efficacy, but it was determined that non-structural alternatives alone would not effectively address the need for the project.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan is listed in Table 1:

Table 1: Summary of Potential Effects of the Recommended Plan

	Insignificant Effects	Insignificant Effects as a Result of Mitigation*	Resource Unaffected by the Action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and wildlife habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Historic properties	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other cultural resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹ 40 CFR 1505.2(b) requires a summary of the alternatives considered.

	Insignificant Effects	Insignificant Effects as a Result of Mitigation*	Resource Unaffected by the Action
Hydrology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices, as detailed in the IFR/EA, will be implemented, if appropriate, to minimize impacts.² The project would incorporate standard best management practices that prevent or reduce impacts to surface water quality. Selective tree removal in Lowell Creek’s upper watershed would be conducted outside of the bird breeding/nesting season, approximately September-January.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI was completed on XXXX. All comments submitted during the public review period will be responded to in the Final IFR/EA and FONSI.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan will have no effect on federally listed species or their designated critical habitat.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that the recommended plan to create diversion tunnel through Bear Mountain will not affect nearby historic properties, namely the Lowell Creek Diversion Tunnel (SEW-00011) would remain in place and used as back up in the event the new diversion tunnel is overtopped. The development of the new diversion tunnel will also protect historic properties within the City of Seward from possible future flooding.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix A of the IFR/EA.

A water quality certification pursuant to Section 401 of the Clean Water Act will be obtained from the Alaska Department of Environmental Conservation prior to construction. All conditions of the water quality certification will be implemented to minimize adverse impacts on water quality.

² 40 CFR 1505.2(C) all practicable means to avoid and minimize environmental harm are adopted.

By operation of Alaska State law, the federally approved Alaska Coastal Management Program expired on July 2011, resulting in a withdrawal from participation in the CZMA's National Coastal Management Program. The CZMA Federal consistency provision, Section 307, no longer applies in Alaska.

All applicable environmental laws have been considered, and coordination with appropriate agencies and officials has been completed.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in the evaluation of alternatives.³ Based on this report, the reviews by other Federal, State and local agencies, Tribes, the input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.⁴

Date XXXX

Damon A. Delarosa
Colonel, Corps of
Engineers District
Commander

³ 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

⁴ 40 CFR 1508.13 stated the FONSI shall include an EA or a summary of it and shall note any other environmental documents related to it. If an assessment is included, the FONSI need not repeat any of the discussion in the assessment but may incorporate by reference.