



Alaska District
U.S. Army Corps of Engineers

Date Aug 2, 2016 Identification No. ER-16-09
Please refer to the identification number when replying.

Environmental Resources Section **Public Notice**

The U.S. Army Corps of Engineers (Corps), on behalf of the United States Coast Guard (USCG), has prepared a draft environmental assessment (EA) and Finding of No Significant Impact (FONSI) for the following project:

**Buskin River Bridge #2 Removal and Potable Water Infrastructure Upgrade
U.S. Coast Guard Station Kodiak, Alaska**

The Buskin River Bridge #2 has eclipsed its historic usefulness and has been condemned. In its current unmaintained state, and because of the hazardous nature of the materials used to construct it, the bridge represents a threat to human health and safety as well as the ecological integrity of the lower Buskin River watershed. Similarly, the primary potable water line servicing USCG Station, Kodiak, was constructed in the 1950's by the U.S. Navy, and has succumbed to normal degradation over time and is identified in multiple areas as being susceptible to flood and seismic damage.

The proposed project and potential environmental impacts are described in the enclosed draft EA and FONSI, which is available for public review and comment for 15 days from the date of this notice. It may also be viewed on the Alaska District's website at: www.poa.usace.army.mil. Click on the Reports and Studies button, look under Documents Available for Public Review, and then click on the Work for Others link.

The FONSI will be signed upon review of comments received and resolution of significant concerns. Please submit comments regarding the proposed action to Michael.B.Rouse@usace.army.mil or to the address below.

U.S. Army Corps of Engineers, Alaska District
ATTN: CEPOA-PM-C-ER
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506-0898

For information on the proposed project, please contact Mike Rouse of the Environmental Resources Section at (907) 753-2743, at the above email, or Corps postal address.

Michael D. Noah
Chief, Environmental Resources Section



United States Coast Guard
U.S. Department of Homeland Security

DRAFT Environmental Assessment for the Buskin River Bridge #2 Removal and Potable Water Infrastructure Upgrade at United States Coast Guard Station, Kodiak



July 2016

United States Coast Guard (USCG)
DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for
**Buskin River Bridge #2 Removal and Potable Water Infrastructure Upgrade
at United States Coast Guard Station, Kodiak**

The attached environmental assessment (EA) supports the finding that there will be no significant impacts to ecological, cultural, or subsistence resources as a result of the removal of the Buskin River Bridge #2 and the replacement of a portion of USCG Station Kodiak's primary potable water supply pipeline. Removal of the bridge will eliminate a known human health and ecological hazard, while replacement of the pipeline will provide operational reliability and a resiliency that the current system lacks.

Through the implementation and integration of best management practices and conservation measures such as those included in USFWS' migratory bird guidance and ADFG's Fish Habitat Permit, USCG's analysis supports the finding that there will be no significant impacts upon the ecological, cultural, or subsistence resources in the lower Buskin River Watershed as a result of the actions associated with USCG's preferred alternative.

This finding of no significant impact is based on the attached United States Army Corps of Engineers prepared EA, which has been determined to adequately and accurately discuss the environmental issues and impacts of the proposed action and provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

I have considered the information contained in the EA, which is the basis for this FONSI. I have submitted my written comments to the Proponent

Date	RAVEN SMITH Environmental Reviewer	Environmental Protection Specialist Civil Engineering Unit Juneau
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In reaching my decision/recommendation on the USCG's proposed action, I have considered the written comments submitted to me from the environmental reviewer and the information contained in the EA and FONSI on the potential for environmental impacts. Based on the information in the EA and this FONSI document, I agree that the proposed action as described above, and in the EA, will have no significant impact on the environment.

Date	ANDREW JOCA, CDR Responsible Official	Commanding Officer Civil Engineering Unit Juneau
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USCG
**DRAFT Environmental Assessment for the Buskin River Bridge #2 Removal and Potable Water
Infrastructure Upgrade at United States Coast Guard Station, Kodiak.**

This Coast Guard environmental assessment (EA) was prepared in accordance with Commandant's Manual Instruction M16475.1D, and is in compliance with the National Environmental Policy Act of 1969 (P.L. 91-190) and the Council on Environmental Quality Regulations dated 28 November 1978 (40 CFR Parts 1500-1508).

This EA serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an environmental impact statement or a finding of no significant impact.

This EA describes the proposed action, the need for the proposal, the alternatives, the environmental impacts of the proposal and alternatives, comparative analysis of the action and alternatives, a statement of environmental significance, and lists the agencies and persons consulted during its preparation.

Date	Environmental Project Manager MICHAEL ROUSE	NEPA Coordinator Alaska District USACE
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Date: 2016.07.27 08:43:48 -07'00'

Date	RAVEN SMITH Environmental Reviewer	Environmental Protection Specialist Civil Engineering Unit Juneau
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In reaching my decision/recommendation on the USCG's proposed action, I have considered the written comments submitted to me from the environmental reviewer and the information contained in this EA on the potential for environmental impacts.

JOCA.ANDREW.S.1186964027

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Date: 2016.07.27 11:01:16 -08'00'

Date	ANDREW JOCA, CDR Responsible Official	Commanding Officer Civil Engineering Unit Juneau
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Environmental Assessment of the Buskin River Bridge #2 Removal and Potable Water Infrastructure Upgrade at United States Coast Guard Station, Kodiak.

1. Proposed Action

United States Coast Guard (USCG) Station, Kodiak requires important infrastructure upgrades to better meet future mission requirements. These upgrades include improvements to its potable water delivery system by replacing a length of the water supply line and removing a widely recognized human health and environmental hazard, the Buskin River Bridge #2.

2. Statement of Need

Originally constructed as part of the Army and Navy Bases' road system during World War II, the Buskin River Bridge #2 has eclipsed its historic usefulness and has been condemned. In its current unmaintained state, and because of the hazardous nature of the materials used to construct it, the bridge represents a threat to human health and safety as well as the ecological integrity of the lower Buskin River watershed. Similarly, the primary potable water line servicing USCG Station, Kodiak, was constructed in the 1950's by the U.S. Navy, and has succumbed to normal degradation over time and is identified in multiple areas as being susceptible to flood and seismic damage.

3. Alternatives Considered

3.1 No-Action Alternative: Under the no-action alternative, the Buskin River Bridge #2 and its emplacements would continue to degrade to the point of failure in Kodiak Island's maritime climate. Failure of the bridge structure would constitute an ecological catastrophe. Currently, the bridge poses a dual environmental threat. First, the bridge's pilings ensnare and concentrate debris flowing downstream. The debris (Figure 1) can be dense enough to alter stream morphology during periods of low water, which may preclude upstream or downstream salmon migration, desiccate existing redds, and isolate edgewater rearing habitats from the main channel of the Buskin River. Second, in its dilapidated state, the bridge represents a human health hazard, not only from a structural integrity perspective, but because its deteriorating components were painted with lead paints.

The existing potable water supply line has been identified as a structure at particular risk from natural disaster. Under the no-action alternative, USCG Station Kodiak's primary potable water infrastructure may not be resilient enough to withstand future episodes of flooding and seismic activity. Disruption of potable water service from a natural disaster may necessitate emergency repair activities that do not consider the impacts of those repairs on ecological, cultural, and subsistence resources as those impacts considered in this EA for the proposed action alternative.



Figure 1. Buskin River Bridge #2 upstream pilings.

3.2 Upgraded Potable Water Supply System Alternative: The potable water supply line originating at the Kodiak Station water treatment facility and continuing to a point immediately adjacent the Buskin River water line crossing would be abandoned in place and replaced by a more substantial conveyance system. Approximately 7,250 linear feet of new 18-inch pipe would be emplaced in the road shoulder opposite from the existing line. Trenching for the replacement line would be confined to the existing roadway and approximately 10-foot roadside buffer; excavated materials would be collected and temporarily stored at an approved lay-down area or side-cast onto the road so that impacts to adjacent wetland areas would be avoided. Best management practices (BMPs) in the form of straw wattles and silt fencing, or an appropriate alternative approved by the USCG would be employed to combat sediment migration outside of the project footprint. Installation of a replacement waterline bridge spanning the Buskin River would be conducted via crane; abutments for this structure would be located in the uplands and would not encroach upon the ordinary high water mark.

3.3 Bridge Demolition Alternative: The 178-foot-long, 20-foot wide Buskin River Bridge #2 would be dismantled in sections and lifted to laydown/vehicle staging areas by a crane located on secure terrain above the ordinary high water line. Prior to demolition, lead abatement would be performed on lead paint bearing structures, which would then be disposed of in accordance with applicable procedures. Support piling bases would be cut at streambed level and abandoned in place. Stream bank areas cleared or grubbed of vegetation as a result of the bridge removal would be revegetated with native vegetation.

3.4 Preferred Bridge Demolition and Upgraded Potable Water Supply System Alternative: USCG's preferred alternative is to both replace the potable water supply line and dismantle and remove the Buskin Bridge #2. Although the projects are not interrelated, the analysis in this assessment

concludes that the combined impacts of the separate proposed project elements on the human and natural environment are negligible, and in the case of the bridge removal, would restore some degree of hydrological and ecological function to the lower Buskin River watershed.



Figure 2. Project Location

4. Summary of the Environmental Impacts of the Proposed Action and Alternatives

U.S. Coast Guard Station, Kodiak derives a portion of its existing infrastructure from the World War II era Army and Navy installations that preceded it. As these features age and deteriorate, the USCG is compelled to evaluate their usefulness and address their maintenance requirements. In some cases, such as that of the Buskin River Bridge #2, its continued existence serves as an example of engineering and design from a significant era of American history. Although the bridge's presence poses a legitimate human health risk, and that its removal will ultimately be beneficial to the overall ecology of the lower Buskin River Watershed, it must be properly documented via Historic American Engineering Record (HAER) before any actions are taken to enact its removal. The USCG and the Alaska State Historic Preservation Office (AK SHPO) have signed a Memorandum of Agreement regarding mitigation measures associated with the demolition of Buskin River Bridge #2.

The Buskin River flows along the northeast coast of Kodiak Island, approximately 4.5 miles southwest of the town of Kodiak. It is identified in the Alaska Department of Fish and Game's (ADFG) catalog of anadromous waters and serves as Essential Fish Habitat for various life stages of multiple Pacific salmonid species. Regionally important in terms of subsistence fisheries, the Buskin River supports the

largest subsistence fishery in the Kodiak/Aleutian region. The sites for replacement of the primary potable water line, its subsequent pipeline bridge, and the Buskin River Bridge #2 are downstream of the outfall at Buskin Lake to a point approximately 1.05 river miles inland from the waters of Chiniak Bay. There are no federally threatened or endangered species known to occur within the footprint of the preferred alternative.

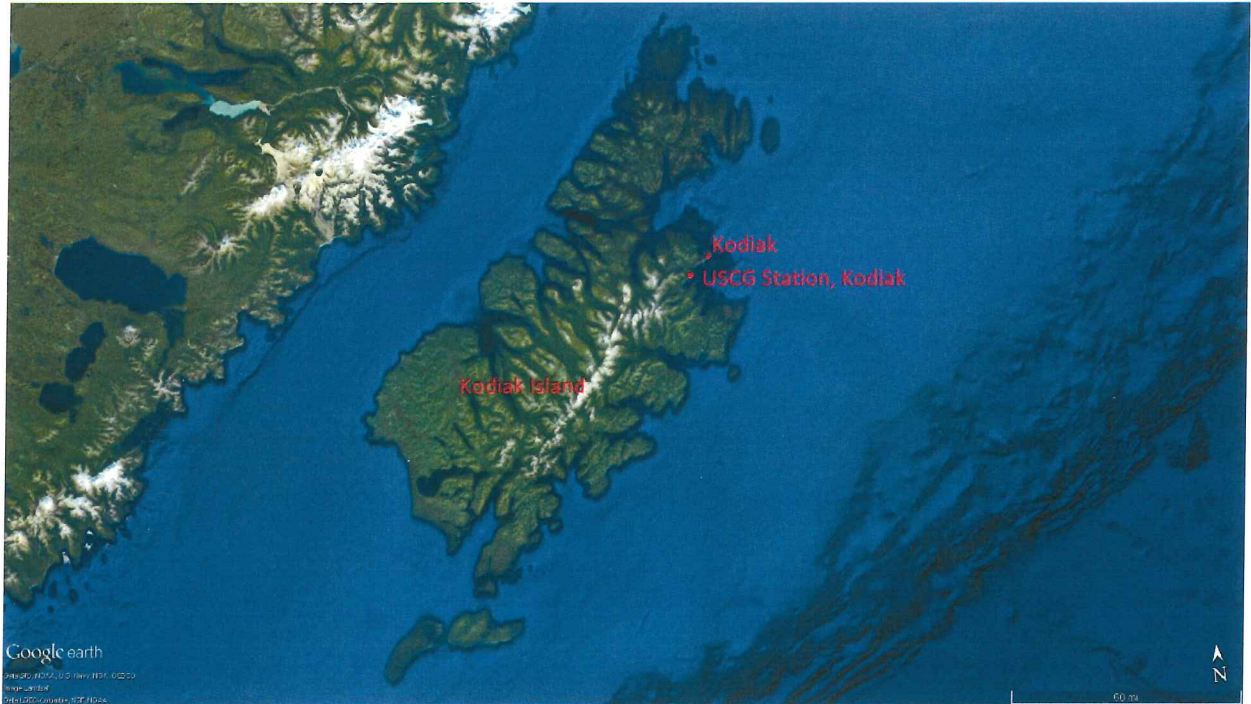


Figure 3. Project Location

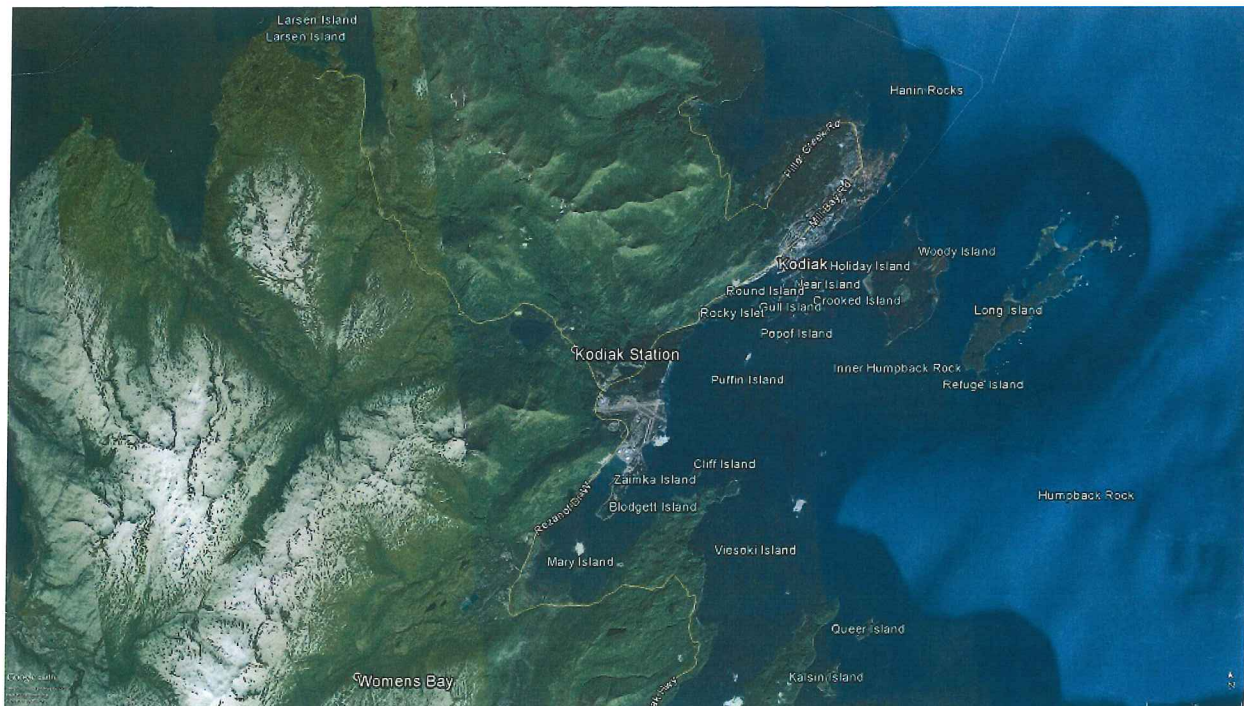


Figure 4. Project Location



Figure 5. Waterline and Buskin River Bridge #2 Depiction

The footprint for the replacement of the primary potable water line is confined to the previously disturbed and existing paved roadway and shoulder area along Anton Larsen Bay Road. Implementation of BMPs to prevent sediment migration into adjacent wetland and natural areas reduce potential impacts associated with this activity to negligible levels. In comparison, removal of the Buskin River Bridge #2 will eliminate a known human health hazard and restore a more natural flow regime to the lower Buskin River Watershed. BMPs recommended by the U.S. Fish and Wildlife Service's guidance concerning reducing impacts to migratory birds and stipulations included in the USCG's Fish Habitat Permit issued by ADFG for this aspect of the preferred alternative will be implemented.

The no-action alternative described in this assessment would not immediately negatively affect ecological, cultural, or subsistence resources associated with the Buskin River Watershed. However, because of the deteriorating nature of this World War II era infrastructure, risk to ecological, cultural, and subsistence resources would be elevated. Failure of the Buskin Bridge #2 could result in the significant alteration of fisheries habitat, introduction of lead-bearing structures into the waters of the Buskin River, loss of opportunity for HAER documentation, and would likely require a comprehensive ecological reconciliation effort. Failure of the USCG Station Kodiak's primary potable water supply line would present the Station with logistical hardships as well as potential degradation to wetland habitat quality.

4.1 Threatened and Endangered Species: There are no documented threatened or endangered species or their respective designated critical habitats in, or immediately adjacent to, the footprint of the Buskin River #2 Bridge or that of the potable waterline replacement. Critical habitat for northern sea otter (*Enhydra lutris kenyoni*) and Steller sea lion (*Eumetopias jubatus*) occurs in the intertidal and marine waters approximately 1.05 river miles downstream of the Buskin River Bridge #2

where the Buskin estuary is formed by the mouth of the river as it empties into the waters of Chiniak Bay.

Northern sea otter and Steller sea lion are not documented as utilizing riverine habitat for their life history processes and are not expected to occur upstream of the intertidal areas at the mouth of the Buskin River (USFWS 2013, NMFS 2008). The USCG has determined that the preferred project, as proposed, will have no effect on endangered species or their respective critical habitats, and that concurrence with USFWS and NMFS under the Endangered Species Act is not required.

4.2 Migratory Birds and Bald and Golden Eagles: The greater Kodiak Island Archipelago is an important region for many populations of migratory and resident birds that are protected under the Migratory Bird Treaty Act ((MBTA) 16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755, and as amended)) and other Federal statutes, such as the Bald and Golden Eagle Protection Act. Colonial sea birds, ducks, geese, raptors, and many species of passerine birds either nest within the archipelago or use it as a waypoint en route to breeding grounds in the Aleutian and Pribilof Islands, coastal cliffs, inland boreal forests, and the Arctic Slope.

USFWS issues Alaska-by-region specific guidance for land clearing and vegetation removal activities that have the potential to impact migratory birds (USFWS 2009). In Alaska, all native birds except grouse and ptarmigan (protected by the State of Alaska) are protected under the MBTA. USFWS guidance for vegetation clearing in the Kodiak Archipelago's forest/woodland and shrub or open-type habitats is to avoid the dates April 15 through July 15. Although USFWS guidelines cannot fully ensure that these avoidance dates are capable of reducing all risk of impact to migratory birds, they represent the BMPs applicable to ensure USCG's compliance with MBTA for its intended projects.

To the most practical extent possible, the USCG will ensure that all vegetation clearing required for the preferred project alternative occurs outside of the USFWS guidance window. Vegetation identified for removal within the proscribed time frame must first be cleared no more than 24 hours prior by a qualified avian monitor (more than 50 documented hours observing and identifying birds of south-central Alaska and possessing knowledge of their respective reproductive phenology). Should nest construction, incubation of eggs, rearing of young, or fledging activities be recorded, vegetation clearing will be postponed until juveniles are fully fledged and have vacated the project area.

Bald eagles are frequently observed along Kodiak Island's coastal corridor and can be observed in relatively high densities at the port of Kodiak where they loiter amongst the fish processing and mooring facilities. Golden eagles are somewhat less commonly observed, but are known to nest within the greater archipelago. Bald eagles in Alaska initiate courtship and nest-building behaviors in January and February, and generally, September through January is considered the non-nesting period (USFWS 2009b). Language included in USFWS' Alaska region eagle permit guidance suggests that because the USCG's preferred project will not adversely modify habitat, and because it occurs in previously disturbed, built-up areas, that eagles in these areas have become habituated to a moderate level of anthropogenic disturbance and would tolerate the temporary activities associated with the bridge removal and waterline replacement. However, if USCG's activities occur during the aforementioned nesting season, the qualified avian monitor shall conduct an eagle nest survey. If an active or alternate

nest is detected within 660 feet of the project footprint, a minimum non-disturbance buffer area of 660 feet shall be maintained until the end of the nesting period (USFWS 2009b). USCG will, to the greatest extent practicable, endeavor to minimize any disturbance to eagles, and may choose to seek appropriate permitting should the constraints of USFWS' disturbance criteria conflict with the construction timeline of the preferred project alternative.

The USCG has determined that through the implementation of USFWS guidelines and the incorporation for the requirement of a qualified avian monitor, if required, it will have completed due diligence with respect to preventing and/or minimizing any impacts to migratory birds and bald and golden eagles as a result of the execution of its preferred project alternative.

4.3 Essential Fish Habitat (EFH) and Anadromous Waters: The Buskin River is identified in the Alaska Department of Fish and Game (ADFG) Anadromous Waters Catalog, and is presented in The Alaska Department of Natural Resources' Division of Parks and Outdoor Recreation Buskin River State Recreation Site information as supporting the largest single subsistence salmon fishery within the Kodiak/Aleutians Region (ADNR 2016). The Buskin River supports runs of pink (*Oncorhynchus gorbuscha*), chum (*O. keta*), sockeye (*O. nerka*), and coho (*O. kisutch*) salmon. It also supports anadromous steelhead (*O. mykiss*) and Dolly Varden (*Salvelinus malma*) populations, which represent important components of the recreational and subsistence fishery. Salmon EFH is defined by its constituent elements as they relate to each individual species' life stages, and have been designated by the Fisheries Management Plan for the Salmon Fisheries in the Exclusive Economic Zone (EEZ) off Alaska. The constituent elements of Alaskan salmon EFH are: freshwater eggs, freshwater larvae and juveniles, estuarine juveniles, marine juveniles, marine immature and maturing adults, freshwater adults (NMFS 2012). Project actions, as proposed, are confined to fresh water, and are analyzed as such in the below sections. The Buskin River Estuary is approximately 1.05 miles downstream of the project site and will not be negatively impacted by project actions, as proposed.

4.3.1 Freshwater Eggs: EFH areas for this specific life stage of salmonid development are located in the fresh waters identified in ADFG's Catalog of Anadromous Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes (ADF&G 1998a). This particular habitat consists of the gravel substrates that coho, chum, sockeye, and pink salmon utilize during spawning for egg emplacement and incubation (NMFS 2012).

4.3.2 Freshwater Larvae and Juveniles: EFH for this specific life stage of salmonid development are those fresh waters identified in ADFG's Catalog of Anadromous Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes (ADF&G 1998a). EFH habitat descriptions for chum and pink salmon for this life history stage are identical and consist of the contiguous rearing areas within the boundaries of the ordinary high water. Fry leave the stream within 15 days, and the duration of migration from the stream to the sea may last 2 months (NMFS 2012).

The coho and sockeye salmon's essential habitat requirements during this life stage are similar to each other in that the habitat is comprised of all contiguous surface waters within the boundaries of the ordinary high water. Juvenile coho generally migrate to a lake, slough, or estuary and rear in these areas

for up to 2 years. Juvenile sockeye generally migrate downstream to a lake or, in systems lacking a freshwater lake, to estuarine and riverine areas for up to 2 years. (NMFS 2012).

4.3.3 Freshwater Adults: Freshwater EFH for adult pink salmon are those waters identified in the ADF&G Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes; and further defined as those spawning substrates consisting of medium to coarse gravel containing less than 15 percent fine sediment (less than 2 mm diameter), 15 to 50 cm in depth from June through September (NMFS 2012).

Freshwater EFH for adult chum salmon are those waters identified in the ADF&G Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes; and further defined as those spawning substrates consisting of medium to coarse gravel containing less than 15 percent fine sediment (less than 2 mm diameter) and the finer substrates that can be used in upwelling areas of streams and sloughs from June through January (NMFS 2012).

Freshwater EFH for adult sockeye salmon are those waters identified in the ADF&G Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes; and further defined as those spawning substrates consisting of medium to coarse gravel containing less than 15 percent fine sediment (less than 2 mm diameter) and finer substrates that can be used in upwelling areas of streams and sloughs from June through September. Sockeye often spawn in lake substrates as well as in streams (NMFS 2012).

Freshwater EFH for adult coho salmon are those waters identified in the ADF&G Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes; and further defined as those spawning substrates consisting of medium to coarse gravel containing less than 15 percent fine sediment (less than 2 mm diameter) from July to December (NMFS 2012).

A multi-agency (USCG, USACE, Su'naq, NMFS, and ADFG) site investigation of the entire preferred project footprint was conducted 10 March 2016. Attending subject matter experts concluded that there would be no negative affect to EFH or waters that flowed into downstream, estuarine EFH as a result of the potable waterline replacement, and that the reasonable application of BMPs would further ensure such a determination. Furthermore, it was presented by Donn Tracy of ADFG that despite the in-water work requirement for the Buskin Bridge #2 removal, any temporary impacts to EFH and water quality could be minimized through the timing of the work to be conducted. Mr. Tracy recommended that the in-water work be completed prior to mid-May, and that the period from mid-June until the end of October be avoided to the greatest extent possible.

The USCG believes that its preferred project, as proposed, will not negatively affect EFH as a result of in-water actions required to remove bridge pilings as a function of overall bridge demolition and removal. NMFS and ADFG envision a return to a more natural streamflow profile at the project site once the bridge and support structures have been removed from the river channel. In its existing state, debris collects on the upstream side of the bridge pilings and impedes and diverts approximately 30 percent of the flow profile (as observed 10 March 2016, M. Rouse personal observation), leaving piling emplacements exposed on slightly elevated gravel bars. On behalf of the USCG, USACE applied for, and

was granted, a Fish Habitat Permit by ADFG pursuant to AS 16.05.871. Numbered FH 16-II-0088, the permit allows for in-water work and the implementation of BMPs associated with the demolition and removal of the Buskin River Bridge #2.

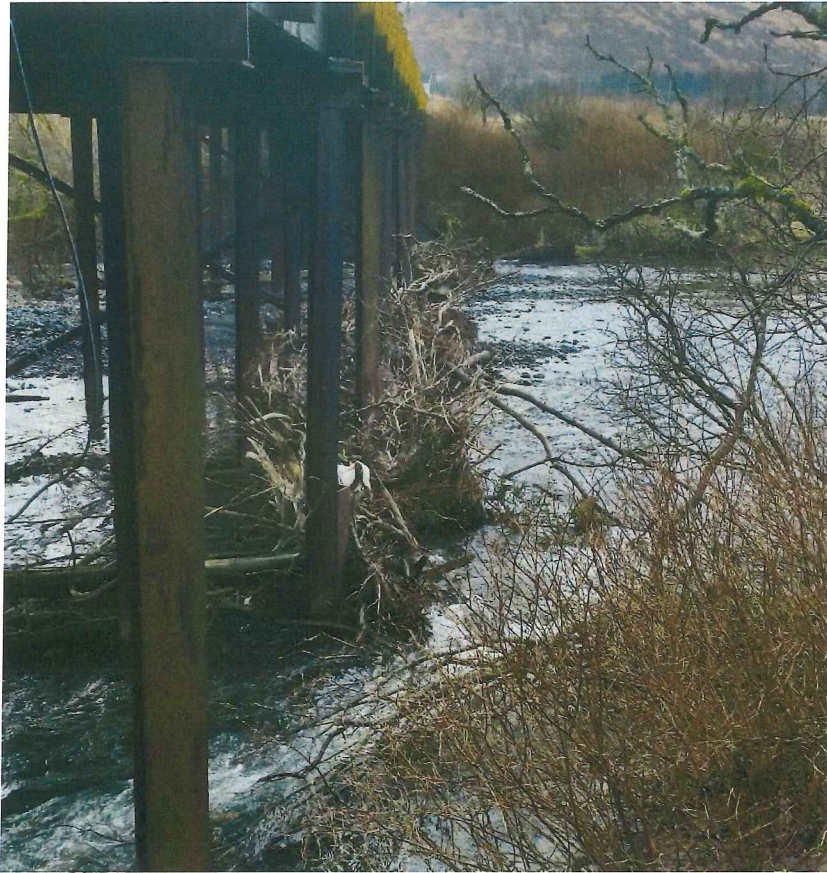


Figure 6. Bridge Pilings Collecting Debris

4.4 Cultural Resources: In a coordination letter dated 25 February 2016, the Alaska State Historic Preservation Officer (AK SHPO) concurred with the USCG's previous determination that the Buskin River Bridge #2 is eligible for the National Register of Historic Places (NRHP) under NRHP Criteria A and C, and that an adverse effect was appropriate for the proposed bridge removal project. In an effort to formally stipulate measures to resolve adverse effects, the AK SHPO proposed that a Memorandum of Agreement (MOA) be developed between the two agencies. The USCG and the AK SHPO staff generated and signed an MOA to mitigate adverse effects by conducting a comprehensive state-level Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) for the Buskin Bridge #2.

In a Section 106 coordination letter dated 06 June 2016, the AK SHPO concurred with the USCG's determination that there would be no historic properties affected by the replacement of the potable water supply line

4.5 Subsistence Resources: The mouth of the Buskin River is approximately 1.05 miles downstream of the Buskin River Bridge #2, and is the site of a historically and culturally significant subsistence salmon fishery utilized by the residents of Kodiak. The long-term viability of this subsistence resource was recently brought into question when potential impacts were being considered and analyzed in the Environmental Impact Statement (EIS) that was prepared by the Department of Transportation and Federal Aviation Administration (DOT/FAA) for improving runway safety areas at Kodiak airport (DOT/FAA 2013). In-water fill required for the expansion of runways 7/25 and 18/36 encroached upon 17.8 acres of nearshore aquatic habitat and totaled approximately 719,000 cubic yards. The fill was identified as having the capacity to change the geomorphology of the Buskin River mouth and alter its freshwater plume. The effects of this action are expected to not only reduce the quantity and quality of EFH and threatened and endangered species habitat, but increase stormwater runoff and alter aquatic species assemblages in the immediate area. A five-year post-construction monitoring effort, compensatory mitigation that was agreed upon between the Su'naq Tribe and the FAA, will document the change in habitat and species utilization in the area influenced by the freshwater plume around the mouth of the Buskin River (DOT/FAA 2013). Runway expansion work concluded in October 2015 and the ecological monitoring effort is underway.

The USCG believes that characterizing the impacts and potential benefits on subsistence fisheries resources as a result of removing the Buskin River Bridge #2 to be difficult in the context of the greater environmental degradation posed by the DOT/FAA runway extension project. In order to direct management policy, ADFG utilizes a set of weirs in the Buskin River to count spawning class salmon that are returning from the ocean. Currently, ADFG maintains escapement goals for sockeye salmon at 5,000 to 8,000 fish, and enumerates coho salmon in the lower system. These data are published on ADFG's website and could ultimately be integrated into a system that compares and contrasts subsistence stock productivity before and after the removal of the bridge, but such a minimalized effort would be challenged to identify and characterize community-wide impacts to the salmon populations in the Buskin River.

The USCG believes that the replacement of the potable waterline will have no impact on subsistence resources in the Buskin River.

4.6 Water Quality and the Protection of Wetlands: Removal of the Buskin River Bridge #2 pilings at bed level was considered an action of high importance due mainly to its potential ecological benefit by ADFG and NMFS personnel during a 10 March 2016 site visit. Piling removal at bed level would eliminate debris concentration and areas of constriction at the site and allow the river channel to flow in a much more natural fashion (D. Tracy, Pers Comm 2016). Substrate in the Buskin River channel beneath the bridge is best characterized as aggregate gravels and cobble with few fine sediments.

Temporary jersey barrier or similar-type modular structure diversions would be manipulated by crane from individual piling row to piling row and configured appropriately to provide in-water hand crews access to the streambed piling interface. Once freed from their piling anchors, sections of the bridge decking would be craned away for disposal in an authorized upland disposal area, and the temporary diversion structures would be removed from the streambed.

The USCG does not believe that wheeled or tracked vehicles would be required for any in-water work, and that the manipulation of the jersey barriers and cutting work required by hand crews constitutes only a temporary, insignificant impact to water quality due to two key factors: first, the substrate composition and its propensity to fall out of suspension in a rapid fashion, and second, because flow diversion activities will be executed specifically to reduce suspension of sediments in the water column.

Concurrently, through the implementation of BMPs, the USCG does not anticipate any impacts on water quality or wetland habitat areas as a result of the replacement of the potable water supply line. The USCG has applied to the USACE for permitting of the specified in-water work activities.

4.7 Air Quality: Kodiak Island's air quality is considered to be good. Its maritime environment and limited anthropogenic influence are the primary factors affecting this determination. Unhindered by continental land masses, alternating atmospheric pressure anomalies originating in the North Pacific Ocean influence wind and weather patterns so that air masses that interact with Kodiak Island's elevated terrain are in continuous motion. The entirety of the Kodiak Island Archipelago does not occur in or near a "non-attainment," "maintenance," or Class I area (as defined by the Clean Air Act). Gaseous or particulate degradation to the immediate air quality as a result of the construction equipment utilized by these proposed projects would not contribute to, or violate any existing standard, and would rapidly return to ambient conditions.

4.8 Socio-Economics: These projects, as proposed, represent an overall beneficial impact to the socio-economic interests on Kodiak Island. In addition to removing a widely recognized human health hazard, the removal of the Buskin Bridge #2 proposes to restore ecological function to the lower Buskin River system, which supports local subsistence fisheries. Concurrently, the replacement of the potable water supply line adds resiliency to a critical system that was previously lacking. The current standard of living on Kodiak Island will not be negatively affected by the replacement of the potable waterline or the removal of the Buskin River Bridge #2. Similarly, there will be no disproportionately adverse health or human safety impacts on children or other potentially underrepresented groups of people as a result of these projects.

4.9 Cumulative Impacts: Federal law (40 CFR 1508.7) requires that NEPA documents assess cumulative effects, which are the impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Replacement of USCG Station Kodiak's potable water supply line and the removal of the Buskin River Bridge #2 share no interdependencies with each other, or any other Federal or private projects currently being considered, or that have been recently conducted.

Although the FAA/DOT project and the removal of the Buskin River Bridge #2 are not related, they both occur within the terminal portions of the Buskin River Watershed. The analysis in this EA, and the subject matter experts that contributed to this analysis, believe that the removal of the Buskin River Bridge #2 will be an overall ecological benefit to the system, but that a net benefit may not be immediately apparent due to the intrusive nature of FAA/DOT project. Data currently being collected by

ADFG and Su'naq biologists will aid in the detection of such a benefit and facilitate future ecological management strategies.

It is conceivable that future refurbishment or replacement of Federal facilities adjacent to this project, or related in some fashion to these projects, as proposed, may be required. However, these instances are unknown at the current time and would be subject to analysis under NEPA.

5. Comparative Analysis of the Proposed Action and Alternatives

5.1 Proposed Action Effects: Analysis conducted in sections 4.1 through 4.9 of this document evaluated potential impacts resulting from the proposed removal of Buskin River Bridge #2 and the replacement of the USCG's primary potable water pipeline on ecological, cultural, and subsistence resources. The analysis consisted of contributions from subject matter experts from the National Marine Fisheries Service, the Alaska Department of Fish and Game, environmental staff of the Su'naq Tribe, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, U.S. Coast Guard, and the Alaska SHPO.

Through the implementation and integration of BMPs and conservation measures such as those included in USFWS' migratory bird guidance and ADFG's Fish Habitat Permit, the USCG's analysis supports the finding that there will be no significant impacts on the ecological, cultural, or subsistence resources in the lower Buskin River Watershed as a result of the actions associated with the USCG's preferred alternative.

5.2 No-Action Alternative Impacts associated with the no-action alternative on the ecological, cultural, and subsistence resources were briefly presented in the summary of impacts in Section 4. Overall, the impact of the no-action alternative is less than significant in the context that these structures in question may continue to exist in their current state for some time to come. Conceptually, the risk of impact to the ecological, cultural, and subsistence resources of the Buskin River Watershed increases with time as these structures are subjected to environmental degradation. Coincidentally, the same conclusion could be drawn when considering the socioeconomic impacts resulting from the natural failure of either of these features.

6. Statement of Environmental Significance of the Proposed Action

Through extensive research and coordination, and with the particular aid and efforts of subject matter experts representing a comprehensive knowledge of the ecological, cultural, and subsistence resources of the Buskin River Watershed, the execution of the preferred alternative, the replacement of the Buskin River Bridge #2 and the replacement of a portion of the Base's potable water supply pipeline, presents no significant impact on the human, biological, or cultural environment.

7. A List of All Agencies and Persons Contacted During The Environmental Assessment.

- United States Fish and Wildlife Service: Bill Pyle, Biologist 907-487-0228.

- National Marine Fisheries Service: Charlene Felkley, Resource Specialist, Habitat Conservation Division, 907-271-1301
- Alaska Department of Fish and Game: Donn Tracy, Biologist, 907-487-2600; William Frost, Division of Habitat, 907-267-2813.
- Sun'ak Tribe of Kodiak: Tom Lance, Natural Resources Department Director, 907-486-4449.
- United States Coast Guard: Raven James Smith, Archaeologist, 206-220-7402; Sajid Khan, Real Property Specialist, 907-487-5302.
- United States Army Corps of Engineers: Michael Setering, Regulatory Specialist, 907-753-2627. Michael Gala, Biologist, 907-753-2821. Shona Pierce, Archaeologist.

8. Cited Literature and Other Resources

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<http://dnr.alaska.gov/parks/units/kodiak/buskinfish.htm>

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<http://kodiakairporteis.com/documents/Kodiak%20ROD%20FINAL%20SIGNED%209-12-13.pdf>

Pers Comm 2016: Personal Communication with Donn Tracy, Area Manager, ADFG, Kodiak Area Office, 10 March 2016.

Personal Observation 2016: Mike Rouse, USACE, 10 March 2016 site visit at Buskin Bridge #2

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NMFS 2008: Recovery Plan for the Steller Sea Lion, Eastern and Western Distinct Population Segments (*Eumetopias jubatus*) March 2008 REVISION. Original Version: December 1992.

USFWS 2009: United States Fish & Wildlife Service Land Clearing Timing Guidance for Alaska, viewed June 2016. http://www.fws.gov/alaska/fisheries/fieldoffice/anchorage/pdf/vegetation_clearing.pdf

USFWS 2009b: Alaska Region – Eagle Permit Guidelines:
http://www.fws.gov/alaska/eaglepermit/guidelines/baea_nhstry_snstvtty.htm

USFWS 2013: Southwest Alaska Distinct Population Segment of the Northern Sea Otter (*Enhydrus lutris kenyoni*) Recovery Plan. July 2013.