

# Draft Environmental Assessment

# Deshka River Steward's Cabin Replacement Project

Matanuska-Susitna Borough, Alaska

FEMA-1663-DR-AK (Public Assistance)

*March 2009*



**U.S. Department of Homeland Security**  
FEMA Region X  
130 228<sup>th</sup> Street SW  
Bothell, WA 98021-979



**FEMA**



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*Prepared for:*

**U.S. Department of Homeland Security**

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*March 2009*



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## Acronyms and Abbreviations

ACMP	Alaska Coastal Management Program
ACZMA	Alaska Coastal Zone Management Act
ADA	Americans with Disabilities Act
ADFG	Alaska Department of Fish and Game
AHRS	Alaska Heritage Resources Survey
APE	Area of Potential Effect
ARPA	Archaeological Resources Protection Act
ASR	Archaeology Survey Report
BMP	best management practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEC	Alaska Department of Environmental Conservation
DNR	Alaska Department of Natural Resources
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
MBTA	Migratory Bird Treaty Act
MSB	Matanuska-Susitna Borough
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA Fisheries	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
PA	Public Assistance
SHPO	Alaska State Historic Preservation Office
TES	threatened, endangered, and sensitive
TMDL	total maximum daily load
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service



# 1.0 Purpose and Need for Action

## 1.1 Introduction

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to support the Matanuska-Susitna Borough (MSB) by providing partial funding to replace a damaged recreation area Deshka River Steward's cabin, located near the shoreline of the Deshka River, near Willow, Alaska (Figure 1.1-1). The small (16 x 16-foot) cabin was submerged under 5 feet of water because of river flooding caused by severe rainfall from August 15 to August 25, 2006. The president declared a federal disaster for the region on October 16, 2006, making funds available to public entities for damage repairs.

The National Environmental Policy Act (NEPA) of 1969 requires FEMA to evaluate the potential impacts of the Proposed Action and alternatives on the human and natural environments. This Environmental Assessment (EA) compares two alternatives for the Deshka River Steward's recreation cabin reconstruction project, the No Action Alternative and the Proposed Action. The EA evaluates potential effects of each alternative on land use, soils and geology, hydrology and water quality, vegetation and wetlands, fish and wildlife, recreation, visual resources, environmental justice, and cultural and historical resources. It also evaluates cumulative effects of the alternatives. Air quality and noise, threatened and endangered species, transportation and access, and topography were considered during an initial screening process, and it was determined that these resources would not be affected by the project. Thus, these resource areas are not covered further in this document.

The NEPA EA process allows FEMA to determine whether to issue a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS), which is required under NEPA for federal actions that may have a significant impact.

## 1.2 Authority

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1973 (Stafford Act), as amended, provides federal assistance programs for both public and private losses sustained in disasters. FEMA provides assistance to private citizens, public entities, and non-profit groups following declared disasters. Under the Federal Disaster Public Assistance (PA) program, FEMA provides federal funding for repairs to restore property and facilities to their predisaster condition.

## 1.3 Proposed Federal Action

The proposed federal action by FEMA is to provide partial project funding to the MSB to replace a River Steward's cabin that was damaged during floods in 2006 (FEMA disaster project 1663-DR-AK).

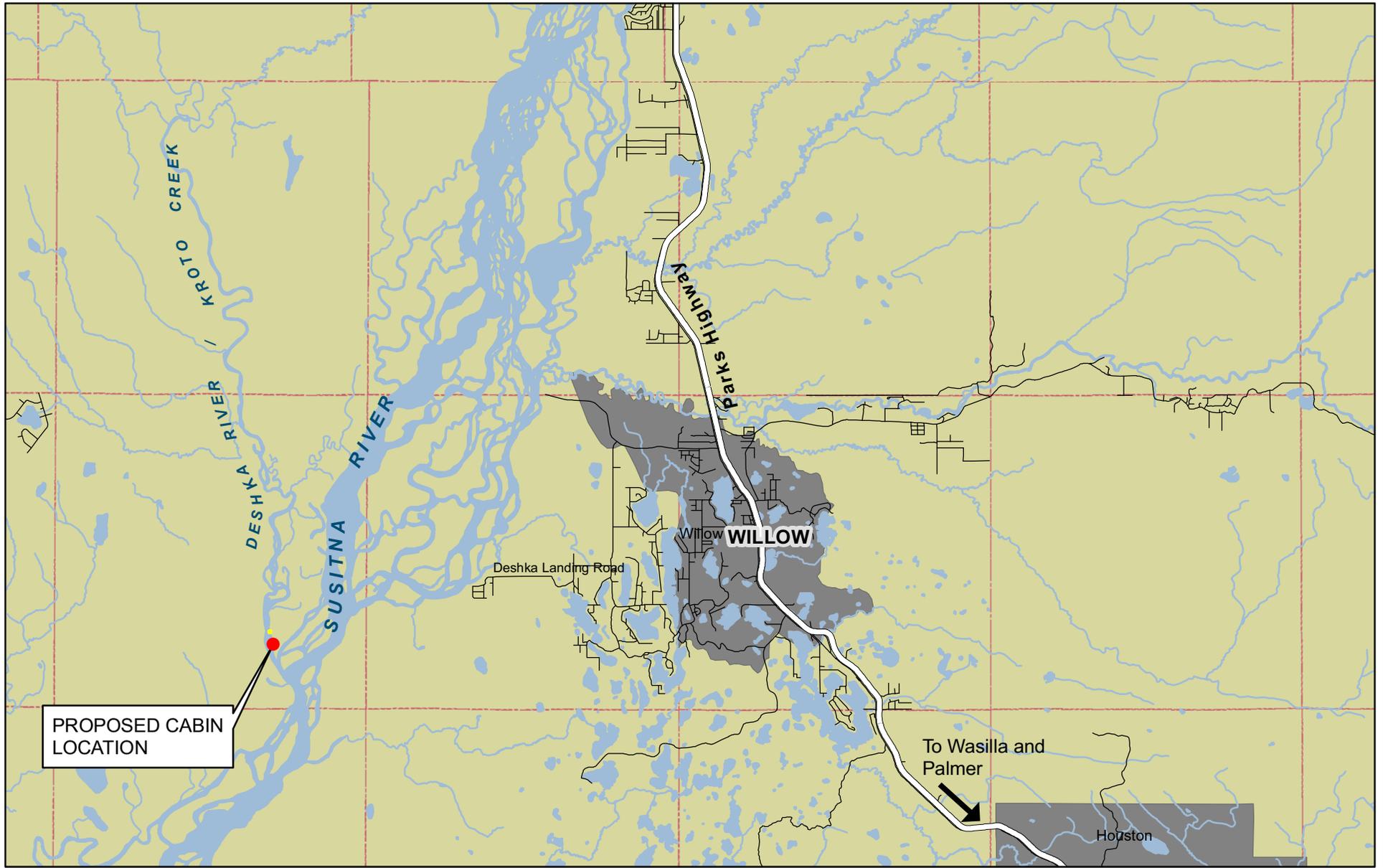
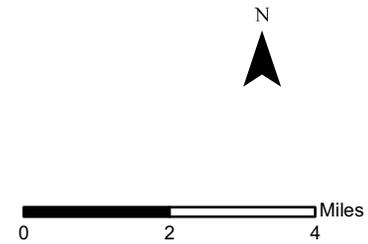


Figure 1.1-1. Project Vicinity

- Project Location
- Cities
- ▬ Roads
- ~ Streams and Rivers
- ▭ Township and Range Lines



## 1.4 Purpose and Need

The purpose of the FEMA Public Assistance program is to assist local communities that request funding to recover from damages caused by presidentially declared disasters. The MSB needs to provide a River Steward's cabin that is available each summer season as a base to manage heavy public use of MSB recreation lands along the Deshka River. The cabin must be located in a flood-free location, consistent with the Public Assistance program.

## 1.5 Related Activities

The MSB Land and Resource Management Division owns and manages land for natural resources and for recreation use. The MSB-owned lands generate revenue through the sale, lease, and permit activities associated with the properties. Permits are issued for various uses including tourism activities, floatplane tie-downs, industrial and commercial staging, campsites, and remote cabin access. The MSB Community Development Department manages public lands adjacent to the Deshka River, from the mouth of the river north to river mile 11, for recreation use. This area includes the project site and other land owned by the MSB and the state of Alaska.

The land surrounding the project site is primarily publicly owned, with a few privately owned parcels along the riverbank. Land use surrounding the project site is mostly undeveloped forest and shrubland, with a few private and public recreation sites and isolated structures (e.g., cabins, stairs, and docks), as well as both designated campground sites in the project area and a primitive camping area to the north.

The Deshka River provides a remote setting for a variety of recreational activities including boating, rafting, fishing, hunting, camping, snowmobiling, dog sledding, and wildlife viewing.

## 1.6 Background and Location

Severe rainstorms from August 15 to 25, 2006, caused severe flooding of the Deshka River, a tributary to the Susitna River. During this August 2006 South-Central Floods Disaster, high water in the Deshka and Susitna rivers flooded the Deshka River recreation area River Steward's cabin. The existing cabin (which is located approximately 100 feet from the shoreline of the ordinary high water mark of the Deshka River) was flooded approximately 5 feet, which damaged the plywood walls and floors, the fiberglass insulation in the walls and floors, and electrical wiring throughout the structure. In addition, the flood washed away the stairs and banister for the deck and damaged or washed away other items within or around the cabin.

The project is located in the Matanuska-Susitna Borough on the Deshka River, approximately 1 mile upstream of the confluence of the Deshka and Susitna rivers. Specifically, the project site is located in Township 19N, Range 6W, Section 26. The project site (i.e., where the replacement cabin would be built) is situated approximately 150 feet from the shoreline of the Deshka River at ordinary high water mark, and approximately 1,500 feet southeast of the existing cabin (Figure 1.6-1). For purposes of this EA, the term "project site" refers specifically to the approximately 10,000-square-

foot area where the new cabin would be constructed; “project area” refers to the broader area of MSB lands in the immediate vicinity of the project site, including the location of the existing River Steward’s cabin; and “project vicinity” refers to the larger region, beyond the boundaries of the MSB property.

The approximate coordinates for the existing River Steward’s cabin are N 61° 42’ 26.0”, W 150° 19’ 21.8”. The approximate coordinates for the proposed new cabin are N 61°42’ 16.7”, W 150° 19’ 06.4”.

## 1.7 Scoping and Issue Summary

### 1.7.1 Scoping

The purpose of the NEPA scoping process is to inform the public, agencies, and tribes about the EA process and to provide an opportunity to comment on the scope of the project, the proposed alternatives, and any potential impacts or issues of concern that should be considered in the EA.

FEMA initiated the scoping process for the project by distributing a scoping letter on October 16, 2008, to agencies and interested parties. The scoping letter explained the NEPA process and the proposal to partially fund a new recreation area River Steward’s cabin. The public, agencies, and tribes were allowed 30 days to provide comments. The scoping letter, mailing list, and comments received are included in Appendix A. The public involvement process is fully described in Chapter 4.

### 1.7.2 Summary of Issues

FEMA has identified a number of issues to be addressed in this EA. No new issues were identified in the several comments submitted in response to the scoping letter. The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) commented that the Proposed Action would “not result in adverse effects to Essential Fish Habitat (EFH) or other resources of concern” to NOAA Fisheries, and they do not object to the project. The Alaska Department of Fish and Game (ADFG) provided contact information. The Alaska Division of Homeland Security and Emergency Management submitted two comments, the first requesting a copy of the EA, and the second noting the benefits of relocating the cabin to higher ground. The Alaska Department of Environmental Conservation (DEC) noted that it must review and approve plans for the gray water holding tank. DEC also provided general guidance for anchoring the tank to prevent floatation for underground (high groundwater) or aboveground (within the base flood elevation) locations. The Alaska State Historic Preservation Office (SHPO) commented that its records show three Alaska Heritage Resources Survey (AHRS) sites within 1 mile of the proposed cabin site east of the Kroto River (i.e., Deshka River). The SHPO asked FEMA to prepare and submit a report documenting the cultural resources surveyed at the site.

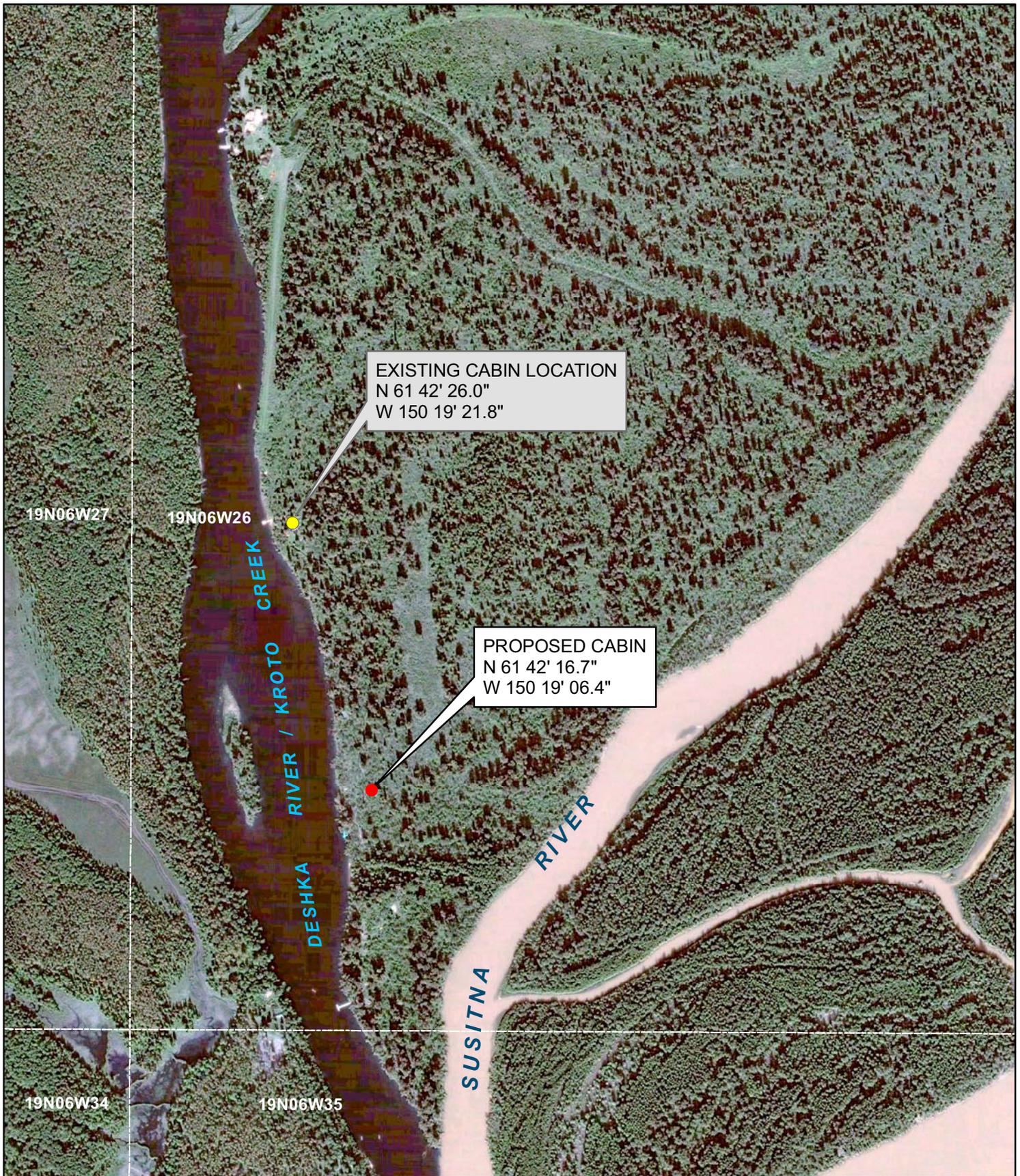
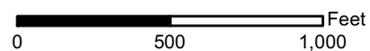


Figure 1.6-1. Project Location

- Project Location
- ▭ Township, Range, Section Lines
- Cities
- ≡ Roads

T19N, R6W, Sec. 26, S.M, AK





## 2.0 Alternatives

This chapter describes the alternatives considered for the replacement of the Deshka River Steward's cabin and the process used to develop these alternatives. Two alternatives are analyzed, the No Action Alternative and the Proposed Action. The following narrative describes the alternatives development process, alternatives eliminated from further consideration, the No Action and Proposed Action alternatives, and elements common to both alternatives. The Deshka River Steward's cabin has been partially repaired for use by the Deshka River Stewards during the 2007 and 2008 summer seasons. The MSB plans to use the existing structures until the replacement cabin and storage facility can be occupied. Once the new facilities are completed, the MSB would decide whether to retain the existing structures, or to remove them and rehabilitate the site by planting native vegetation.

### 2.1 Alternatives Development

NEPA requires federal agencies to consider a reasonable range of alternatives that meet the purpose and need of a proposed action. The NEPA alternatives development process allows FEMA to work with interested agencies, tribes, the public, and other stakeholders to develop alternatives that respond to identified issues. FEMA coordinated with the MSB to develop the Proposed Action.

#### 2.1.1 Alternative Elements Eliminated From Further Consideration

FEMA discussed development of the elements of the Proposed Action with the MSB, the project applicant. There are limited environmentally sensitive options for siting a new cabin that provide convenient access to the Deshka River recreation sites. The MSB has determined that it is not reasonable to reconstruct the existing River Steward's cabin at its current location in the Deshka River floodplain because of the potential for future flood damage. Reconstruction would require considerable construction (and associated costs) every few years to respond to periodic flood damage. This alternative would not be consistent with FEMA's Public Assistance program and requirements to locate projects in a flood-free location and was not analyzed further.

The MSB considered relocating the River Steward's cabin to higher bluffs on the opposite shore of the Deshka River (the western shore). However, this location was determined to not be feasible because of steep, unstable slopes and excessive construction costs. The MSB also considered sites farther up river along both sides of the river but eliminated them because of limited suitable building sites, difficult access, increased construction cost, increased travel time, and higher seasonal water levels (Templin 2008). These alternative locations for the new cabin were not analyzed further.

The limited comments received during the scoping process (see Chapter 1) did not cause FEMA to consider adding or removing elements to the Proposed Action. The few issues raised during the scoping process are addressed in the impact analysis for specific resources sections in Chapter 3.

#### 2.1.2 Alternative A - No Action

Under the No Action Alternative, FEMA would not provide any federal funds to the MSB to construct a new River Steward's cabin. The existing cabin would remain in its present condition and would be available for limited use. However, the existing cabin would continue to be vulnerable to

regular flooding. As a result, the MSB would need to consider the substantial cost of major repairs every few years and the continuing risk that the cabin would become uninhabitable and unusable as a summer base to manage heavy public use of MSB recreation lands.

### 2.1.3 Alternative B - Proposed Action

Under the Proposed Action, FEMA would provide the MSB with partial funding to construct a new cabin to support the recreation River Steward's program on the Deshka River. The Proposed Action includes building an elevated 2-story cabin (20 x 24-foot), located at a site approximately 6 feet above the elevation of the existing cabin and approximately 150 feet from the shoreline of the Deshka River; the new cabin would be further elevated on pilings another 5 to 6 feet above the ground. The new site is the highest point on the peninsula that was dry during the last 100-year flood in August 2006. A portable toilet would be located nearby. The gray water from the kitchen sink would be drained into a holding tank adjacent to the cabin. Both the portable toilet and the gray water holding tank would be pumped regularly throughout the summer. The MSB also would construct a small (12 x 12-foot) storage building near the new cabin. While not part of the Proposed Action, it would be a connected action.

The design, construction, and long-term maintenance of the project would comply with applicable rules and regulations. The MSB would be required to follow state and federal regulations for best management practices (BMPs) during construction. The project would be designed, constructed, and maintained according to the MSB Facility Design Criteria Manual (MSB 2008a). Construction would not occur when weather and/or ground conditions would cause excessive erosion. Vegetation clearing would be minimized, with the creation of a relatively small grassy area surrounding the new cabin. The Deshka River Stewards conduct projects that include site revegetation and shoreline mitigation, and they would continue this work around the new cabin. Native materials would be used when available and appropriate for the site.

Construction activities would involve clearing and grubbing, foundation placement, building construction, and seeding, fertilizing, and mulching the disturbed areas. Clearing, grubbing, and brushing would involve removing and disposing of snags, down timber, brush, surface objects, and protruding obstructions within the clearing limits (assumed to be an area 100 feet by 100 feet, centered on the cabin); approximately 10,000 square feet is used throughout the analysis in this EA as a reasonable clearing area. All danger trees, leaning trees, and snags outside the clearing limits that could fall into the construction area also would be removed.

Construction would be completed over one season. In the project vicinity, the construction season typically extends from June through September, when the ground is not frozen. Standards and BMPs to minimize impacts during construction include (but are not limited to) the following:

- Limiting ground disturbance (clearing, grubbing, grading) to that essential for construction of the project;
- Scheduling construction activities that expose large areas of soil to reduce erosion potential; and
- Incorporating erosion or sedimentation control measures (mulching, seeding, planting, use of silt fences).

Maintenance activities would be limited and would follow MSB standards (MSB 2008a).

### 2.1.4 Elements Common to Both Alternatives

While the No Action Alternative and Proposed Action alternative represent distinctly different alternatives, they share common elements, as described below.

- **Water Quality, Erosion, and Sediment Control** - The MSB would continue to implement measures to preserve the water quality of the Deshka River and prevent excess erosion and sedimentation associated with operating and maintaining the recreation facilities.
- **Cultural and Historic Resources** - The MSB would continue to comply with Sections 106 and 110 of the National Historic Preservation Act (NHPA), the Archaeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA). The MSB, as required under 36 Code of Federal Regulations (CFR) 800, would consult with the Alaska State Historic Preservation Office (SHPO) and interested tribes to determine if sites are eligible for inclusion on the National Register of Historic Places (National Register), evaluate the effects of any action on eligible properties, and identify preservation or mitigation options. Specifically, the MSB would monitor construction activities and stop work and consult with the tribes and the SHPO if any cultural resources are discovered.
- **Access** - The public would continue to have access to MSB lands consistent with current policies that consider public safety and protection of cultural and natural resources.
- **Public Information** - The MSB would continue to apply its standards for appropriate, clear, and consistent signage regarding public use of its lands and facilities. The MSB also would continue to provide information materials through existing entities, websites, and recreation areas.

## 2.2 Summary of Impacts

Table 2.6-1 summarizes impacts on specific resource areas, as described in the analysis in Chapter 3.

**Table 2.6-1. Summary of Impacts of the No Action and Proposed Action Alternatives.**

<b>Resource Area</b>	<b>Alternative A – No Action Alternative</b>	<b>Alternative B – Proposed Action</b>
Land Use	No anticipated impacts	Minor vegetation clearing; no significant adverse impacts on surrounding land use
Soils and Geology	Potential for minor maintenance on existing cabin with little or no soil disturbance; no significant adverse impacts	Construction would disturb approximately 10,000 square feet of soil at new cabin location; no significant adverse impacts
Hydrology, Water Quality, and Floodplains	Seasonal occupation of existing cabin could contribute to minor water quality effects; no significant adverse impacts	Potential for minor, short-term sedimentation associated with construction activities; potential minor effects from seasonal occupation of new cabin; no significant adverse impacts
Vegetation and Wetlands	Potential for minor maintenance on existing cabin with little or no vegetation disturbance; no significant adverse impacts	Approximately 10,000 square feet of land would be cleared of existing vegetation for new cabin construction; no significant adverse impacts
Fish and Wildlife	Potential for minor impacts on fish and wildlife from seasonal use of existing cabin; no significant adverse impacts	Potential for minor, short-term effects on fish and wildlife populations associated with construction activities; small amount of habitat loss associated with new cabin site; potential minor effects from seasonal use of new cabin; no significant adverse impacts
Recreation	If unmitigated, significant adverse effect associated with loss of base of operations for River Stewards to manage recreation use in the project vicinity	Beneficial impact associated with new cabin site, providing base of operations for River Stewards; no significant adverse impacts
Visual Resources	Minor visual-related impacts at campground associated with decreased maintenance activities; no significant adverse impacts	Minor, localized visual impacts associated with presence of new cabin; no significant adverse impacts
Environmental Justice	No significant adverse impacts	No significant adverse impacts
Cultural and Historical Resources	Potential for disturbing previously unidentified cultural resources very unlikely; no significant adverse impacts	Potential for disturbing previously unidentified cultural resources very unlikely; no significant adverse impacts
Cumulative Impacts	No significant adverse cumulative impacts	Minor cumulative impacts associated with construction of new cabin, such as vegetation clearing and removal; no significant adverse cumulative impacts

## 3.0 Affected Environment & Environmental Consequences

The environmental analysis is presented below. For each potentially affected resource topic, the analysis includes a description of the affected environment (including applicable laws and regulations), the thresholds of significance used to determine potential impacts for that particular resource topic, a summary of the potential environmental impacts associated with the two alternatives under consideration, and any mitigation measures that would be implemented.

### 3.1 Land Use

#### 3.1.1 Affected Environment

The MSB Land and Resource Management Division owns and manages lands for natural resources and for recreation use. The MSB owns the project area adjacent to the Deshka River, and the MSB Community Development Department manages the area for recreation use. The MSB lands in the project area include designated campground sites (adjacent to the existing cabin and within approximately 0.25 miles of the project site) and a primitive camping area (approximately 0.75 miles north of the project area). Land use on the project area is currently rural recreation and natural wildlife habitat, and most of the land is undisturbed native vegetation.

Most of the surrounding land is publicly owned, with a few privately owned parcels along the river. Most of the land in the vicinity is managed as natural forest and shrubland. A few primitive private and public recreation facilities with isolated structures (including cabins, stairs, and docks) are scattered on nearby parcels adjacent to the Deshka River. These parcels are located downstream of the project area, and only a few of the structures are visible from a boat.

#### Adjacent Land Uses

Because of its remote location, the project site and adjacent land are indistinguishable. The immediately adjacent property is public shrub and forest land located on terrain similar to the project site. The land is managed for recreation use and as habitat. Private cabins and public recreation structures are scattered nearby, resulting in a rural development pattern in the project vicinity.

#### 3.1.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. The No Action Alternative and the Proposed Action were determined to result in a significant effect on land use if they:

- Would have a significant, adverse impact on existing land uses in the vicinity; or
- Would be significantly impacted by existing land uses in the vicinity.

#### 3.1.3 Environmental Consequences

##### Alternative A: No Action

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there

would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB; land use would continue to be consistent with surrounding properties despite the deterioration of the cabin and potential abandonment. Impacts on land use would not occur, and associated thresholds of significance would not be exceeded.

### **Alternative B: Proposed Action**

Under the Proposed Action, the new River Steward's cabin would be constructed and maintained. The new cabin would be consistent with the surrounding land use, characterized by a few dispersed recreation structures on the surrounding properties. Because minimal vegetation would be disrupted with the construction of the cabin, the cabin setting also would be consistent with the surrounding land use. Thus, there would be no significant adverse effect on land uses in the vicinity of the project.

### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

## 3.2 Soils and Geology

### 3.2.1 Affected Environment

Alaska consists of numerous geologic terranes, blocks of continental crust that originated elsewhere and became attached to a new continent. The project vicinity is located within a terrane of Cenozoic unconsolidated sediments, formed and shaped from 65 million years ago to the present. These sediments comprise numerous source rock types. The project area is within a large glacial outwash in an alluvial plain of glacial deposits formed in the Pleistocene epoch (2 million to 10,000 years ago). The resulting landforms are relatively flat with a low risk of landslide.

The major soil series in the project area is the Susivar-Niklavar association. Characteristics of this association include very deep, somewhat poorly drained soils to poorly drained soils (NRCS 1998). The soils are generally not very erodible.

The project area is situated on a nearly flat alluvial plain, with an elevation of approximately 100 feet above mean sea level and slopes of less than 5 percent. Soils include Susivar-Niklavar fine sandy loams (NRCS 1998). The depth of the water table fluctuates widely in response to changing river levels from spring through fall.

### 3.2.2 Threshold of Significance

The No Action and the Proposed Action alternatives were determined to result in a significant effect on soils and geology if they would:

- Present a substantial risk to people or property because of geologic hazards such as landslides; or
- Result in soil erosion rates substantially greater than natural levels; or
- Result in an accumulation of sediment in aquatic habitats.

### 3.2.3 Environmental Consequences

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and would be maintained and repaired as needed by the MSB, and little or no soil disturbance would result. Impacts on soils or geologic resources or on aquatic habitats would be minor, and the associated thresholds of significance would not be exceeded.

#### **Alternative B: Proposed Action**

Under the Proposed Action, the new cabin would be located on the same alluvial outwash as the existing cabin. Construction activities (clearing and brushing, grubbing, excavation, and grading) would disturb approximately 10,000 square feet of soil around the new cabin location and within the clearing limits.

The new cabin would not affect any slide areas or other high risk sites, and would not affect geologic stability in the project area. Construction, operation, and maintenance of the new cabin would not

disturb any steep slopes or present a landslide risk. The construction activities described above would create minor increases in erosion during and after construction because of the removal of vegetation. These effects would be minimized by designing and constructing the project in compliance with established BMPs; strategies to minimize erosion during construction include the following:

- Limiting ground disturbance (clearing, grubbing, grading) to the area essential for project construction;
- Scheduling construction activities that expose large areas of soil for drier periods of spring, summer, or early fall to reduce erosion potential; and
- Incorporating erosion control measures (mulching, seeding, or planting).

With implementation of these BMPs and construction strategies, no thresholds of significance would be exceeded, and no significant impacts are anticipated under the Proposed Action.

### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

### 3.3 Hydrology, Water Quality, and Floodplains

#### 3.3.1 Affected Environment

The Deshka River and adjacent lands are located in the Cook Inlet Basin in the coastal region of Southcentral Alaska. The climate in Southcentral Alaska is transitional, with both maritime and arctic climatic influences. These influences include moderating maritime temperatures from the Gulf of Alaska and cooling continental and arctic winds from the north, although these winds often are blocked by the Alaska and Talkeetna mountain ranges. The project vicinity is cool during the summer (with an average temperature around 50°F) and cold during winter (with an average temperature around 0°F). Much of the annual precipitation falls as snow, although the area also receives considerable rainfall.

The headwaters of the Deshka River are in steeper hills and mountains north of the project area. These drainages flow into Kroto Creek and then into the Deshka River. The Deshka River is a tributary to the Susitna River, which, like other rivers in the vicinity, flows into the Pacific Ocean via Cook Inlet. Because of the relatively flat topography and the abundant precipitation, the area has a high density of wetlands, lakes, and streams.

The project area is located in the middle of the Susitna River watershed (a subbasin of the Cook Inlet basin), on the edge of a glacial outwash plain, which drains directly into Cook Inlet and the Pacific Ocean. The Susitna River watershed encompasses approximately 6,250 square miles and is a large and important watershed in the Cook Inlet drainage (MSB 2008b).

There is no surface hydrology and no appearance of perennial tributaries directly adjacent to or through the project site, which is approximately 150 feet from the shoreline of the ordinary high water mark of the Deshka River. There may be some intermittent streams in the area that deliver water directly to the Deshka River during high flow events. Wetlands are described in Section 3.4 (*Vegetation and Wetlands*). Much of the surrounding area, including the site of the existing River Steward's cabin, regularly floods. The FEMA Flood Insurance Rate Map (FIRM) panel dated 1985 (FM0200218750C) designates the area as Zone D, indicating an area of undetermined but possible flood hazard (FEMA 1985).

#### **Regulatory Environment**

Executive Order (EO) 11988 requires FEMA (and other federal agencies) to avoid to the extent possible adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. This is accomplished by taking actions that reduce the risk of flood loss; minimize the effects of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains.

The Alaska DEC administers the federal Clean Water Act (CWA) in Alaska. Every 2 years, the DEC assesses water quality and reports to the U.S. Environmental Protection Agency (EPA) on the condition of Alaska's waters. The DEC prepares an Integrated Report that meets the requirements of Section 303(d) and Section 305(b) of the CWA. Section 303(d) requires the identification of impaired waters, or waters that do not meet water quality standards where a Total Maximum Daily

Load (TMDL) needs to be developed. Alaska's 2008 Integrated Report Section 303(d) list was submitted to the EPA on March 19, 2008. Alaska's Final 2008 Integrated Report of Section 303(d) list of water bodies identifies the Deshka River as a Category 3 water body, indicating that the data are insufficient to determine if any designated use standard is attained (DEC 2008).

The Alaska Coastal Zone Management Act (ACZMA) requires federal agency activities, including federal license or permit activities and federal financial assistance activities, that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone, to be consistent to the maximum extent practicable with the enforceable policies of a coastal state's federally approved coastal management program. The Alaska Department of Natural Resources (DNR) administers the Alaska Coastal Management Program (ACMP), which consists of a coordinated package of state and local statutes for managing Alaska's coastal lands and waters.

The ACMP applies to Alaska's Coastal Zone, which extends along the length of Alaska's coastline. The Coastal Zone is defined based on the general relationships between the marine environment and the terrestrial environment (DNR 2005). The project area is located within Alaska's Inland Coastal Zone.

### 3.3.2 Threshold of Significance

The No Action and the Proposed Action alternatives were determined to result in a significant effect on hydrology and water quality if they would:

- Violate any water quality standards or waste discharge requirements, create or contribute runoff water that would provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality; or
- Alter the existing drainage pattern of the project site in a manner that would result in the substantial erosion or siltation on or off the site, result in flooding on or off the site, or exceed the capacity of existing or planned stormwater drainage systems; or
- Conflict with Executive Order 11988 requirements to avoid to the extent possible adverse impacts associated with the occupancy and modification of floodplains.

### 3.3.3 Environmental Consequences

#### Alternative A: No Action

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB. Any water quality impacts would be minor, despite deterioration of the cabin and potential abandonment, and associated thresholds of significance would not be exceeded.

#### Alternative B: Proposed Action

Under the Proposed Action, the new cabin site would not cross or abut surface water features, and construction would not require work in or near water bodies. The Proposed Action would not alter the existing drainage patterns in the area and would be consistent with EO 11988.

Construction activities (clearing and brushing, grubbing, excavation, and grading) would disturb approximately 10,000 square feet of soil around the new cabin location and within the clearing limits. However, any potential increase in soil erosion during and after construction would be minor and would not significantly increase sedimentation to the Deshka River or violate any water quality standards. Implementation of the Proposed Action would not result in any significant impacts on hydrology, water quality, or floodplains.

### **Mitigation Measures and Residual Impacts**

The DEC regulates the handling of waste water and must approve plans for the holding tanks to be maintained (under the No Action Alternative), or installed and maintained (under the Proposed Action). The DEC review would ensure that any tanks are sufficiently anchored to prevent them from floating during high groundwater or flood flows. Both the portable toilet and the gray water holding tank would be pumped regularly throughout the summer and at the close of the operating season. NEPA also requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No additional mitigation measures are proposed under either alternative.

## 3.4 Vegetation and Wetlands

### 3.4.1 Affected Environment

#### Vegetation Communities and Dominant Species

The dominant vegetation and plant communities in the Deshka River floodplain are open balsam poplar woodlands, open balsam poplar-white spruce forests, and dense alder and willow stands. The maturity of dominant trees depends on the frequency and intensity of flood events outside of the river channel. The forest is open canopy conifer and hardwood trees; grasses and shrubs dominate the understory.

The project site and surrounding areas have been undisturbed by human activities for as long as the MSB has owned the property. Currently, vegetation communities on the project site and in the surrounding areas are open balsam poplar woodlands. Mixed tree species dominate the sparse and open canopy, including black cottonwood/poplar (*Populus balsamifera*) and white spruce (*Picea glauca*). The secondary tree layer consists of scattered alder (*Alnus rubra*), willow (*Salix* sp.), and juvenile poplar (*Populus* sp.). The understory shrub species are primarily reedgrass (*Calamagrostis canadensis*), fireweed (*Epilobium angustifolium*), wild rose (*Rosa acicularis*), raspberry (*Rubus idaeus*), red currant (*Ribes rubrum*), highbush cranberry (*Viburnum edule*), and cow's parsnip (*Heracleum maximum*). The herbaceous ground layer includes a variety of species including horsetail (*Equisetum* spp.) and bunchberry (*Cornus canadensis*).

No wetland habitats occur on or adjacent to the project site. The edge of the Deshka River, 150 feet from the project site, supports riverine riparian habitat.

#### Rare Plant Species

For the purposes of this EA, special status plants species are defined as plants that are legally protected or that are otherwise considered sensitive by state resource conservation agencies and organizations, or some federal agencies. Specifically, this includes species that are state-listed as rare, threatened, or endangered; species considered candidates for listing as threatened or endangered; or species listed by the Conservation of Arctic Flora and Fauna Program as a plant species of special concern.

No special status or rare plant species are known to occur or could potentially occur within the project area (Lipkin and Murray 1997).

An EDAW biologist visited the site on August 27, 2008, to collect information on general site conditions, special habitat features, and vegetation communities in the project area. Most of the special status species listed for Alaska have specific habitat requirements that are not present on the project area. None of the rare species or potential habitat were observed during the site visit.

#### Wetlands

Executive Order 11990 requires FEMA (and other federal agencies) to "minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of

wetlands". To meet these objectives, the Order requires federal agencies to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided.

### 3.4.2 Threshold of Significance

Significance under NEPA is determined by assessing the impact of a proposed action in terms of its context and the intensity of its effects. The project footprint does not encompass nor is it near wetlands, riparian habitat, or any other identified sensitive natural communities. Therefore, these vegetation habitats are not described further in this report. In addition, no special status plant species could potentially be present in the project area. Nonetheless, the No Action and the Proposed Action alternatives were determined to result in a significant effect on vegetation if they would:

- Directly reduce the number or restrict the range of any plant species identified as a candidate, sensitive, or special status species in statewide plans, policies, or regulations; or
- Conflict with Executive Order 11990 and its direction to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

### 3.4.3 Environmental Consequences

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB. Any impacts on vegetation would be minor, and associated thresholds of significance would not be exceeded.

#### **Alternative B: Proposed Action**

Under the Proposed Action, construction activities (clearing and brushing, grubbing, excavation, and grading) would permanently displace approximately 10,000 square feet of native vegetation, with the understory shrub layer and herb layer experiencing the most impact. The new cabin was specifically sited to avoid disturbing any large or significant trees in the project area. Because there are no rare plants with habitat and no wetlands in the project area, the proposed site disturbance and revegetation would not have a significant impact on vegetation or wetlands.

#### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

## 3.5 Fish and Wildlife

### 3.5.1 Affected Environment

#### General Wildlife and Habitat

The project area and vicinity may provide temporary refuge, foraging habitat, or nesting area for a variety of mammals, bird, and amphibian species. Moose (*Alces alces*), mule deer (black-tailed deer [*Odocoileus hemionus*]), brown bear (*Ursus arctos horribilis*), black bear (*Ursus americanus*), and lynx (*Lynx canadensis*) are some of the large mammal species found in the vicinity. The small mammals that may use the project area and vicinity include carnivores (coyote [*Canis latrans*], red fox [*Vulpes vulpes*], river otter [*Lontra canadensis*], marten [*Martes americana*], ermine [*Mustela erminea*], least weasel [*Mustela nivalis*], and mink [*Mustela vison*]); rodents (red squirrel [*Tamiasciurus hudsonicus*], northern flying squirrel [*Glacomys sabrinus*], beaver [*Castor Canadensis*], voles [e.g., *Microtus* spp.], brown lemming [*Lemmus trimucronatus*], muskrat [*Ondatra zibethicus*], and porcupine [*Erethizon dorsatum*]); one lagomorph (snowshoe hare [*Lepus americanus*]); insectivores (shrews [e.g., *Sorex* spp.]); and at least one species of bat (little brown bat [*Myotis lucifugus*]). Most of these species are likely to be found in higher densities in higher quality riparian habitats closer to the river and throughout areas with less human disturbance upstream and downstream of the project area.

Bird species found in the project vicinity include a wide array of migratory species and some common resident species. Many of the migratory bird species are seasonal residents without fidelity to the project vicinity and use other sites during periods of human disturbance. One amphibian species (the wood frog [*Rana sylvatica*]) may inhabit the shoreline areas near the Deshka River within the project vicinity, but none were found at the project site.

Habitat in the immediate vicinity of the project site is open balsam poplar forests with heavy shrub coverage. Trees are scattered throughout the project area and do not form a closed canopy. The small trees (alder, willow) and shrub layer (grass, fireweed, rose) form a single, dense understory layer. There are few snags and no downed wood within the immediate landscape of the project area. Riparian habitat is dominated primarily by young willow along the shore of the Deshka River, approximately 150 feet from the project site. No wetlands or other aquatic habitats occur on the project site.

#### Aquatic Species and Habitat

The MSB owns and manages 10,000 acres along the lower reaches of the Deshka River, surrounding the project site. The Deshka River is a clear-water tributary of the Susitna River. It is a fish-bearing river and provides habitat for anadromous runs of Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), sockeye salmon (*O. nerka*), pink salmon (*O. gorbuscha*), and chum salmon (*O. keta*), as well as resident populations of whitefish, rainbow trout (*Oncorhynchus mykiss*), and arctic grayling (*Thymallus arcticus*) (ADFG 2008). The project site is approximately 150 feet from the shore of the Deshka River, and is within the floodplain of the river. There are no tributaries or streams near the project site.

## **Regulatory Environment**

Migratory bird species that may occur in the project area are protected under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act. No species that are listed under the federal Endangered Species Act (ESA) of 1973 (16 United States Code [U.S.C.] 1531-1544) occur in the vicinity.

### **The Migratory Bird Treaty Act**

The MBTA provides that it shall be unlawful, except as permitted by regulations, “to pursue, take, or kill...any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions” with certain other countries (16 U.S.C. 703). This prohibition includes direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds in Alaska, including the bald eagle (*Haliaeetus leucocephalus*), which was recently delisted from the federal ESA.

### **The Bald and Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act, originally passed in 1940, prohibits the take, possession, sale, purchase, barter, offer to sell, purchase, or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). “Take” means to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” a bald or golden eagle. The term “disturb” under the Bald and Golden Eagle Protection Act was recently defined within a final rule published in the Federal Register on June 5, 2007 (72 Fed. Reg. 31332). “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

## **Special-status Fish and Wildlife Species**

For purposes of this EA, special status wildlife species in this section are defined as fish and wildlife species that are legally protected or that are state-listed as rare, threatened, or endangered; species considered as candidates for listing as threatened or endangered; or species listed by ADFG as wildlife species of special concern. The special status species that may occur in the project vicinity include the olive-sided flycatcher (*Contopus cooperi*), gray-cheeked thrush (*Catharus minimus*), and blackpoll warbler (*Dendroica striata*). The bald eagle is described because it is legally protected under the Bald and Golden Eagle Protection Act. There are no special status fish species found in the project area.

Special status fish and wildlife species that may occur in the project area or vicinity are listed in Table 3.5-1.

**Table 3.5-1. Special Status Fish and Wildlife Species that Potentially Occur in the Project Area or Vicinity.**

Common Name	Scientific Name	Special Status	Habitat Use or Requirements
Olive-Sided Flycatcher	<i>Contopus cooperi</i>	ADFG species of special concern; federal species of management concern	Neotropical migrants who breed in central Alaska in the summer. Habitat includes coniferous forest or mixed deciduous/coniferous forests with nearby openings in the canopy cover and water, including streams, beaver ponds, bogs, and lakes.
Gray-cheeked Thrush	<i>Catharus minimus</i>	ADFG species of special concern	Neotropical migrants who breed in central Alaska in the summer. Habitat includes areas with a closed canopy of small shrubs and a dense understory, up to the edge of the tundra.
Blackpoll Warbler	<i>Dendroica striata</i>	ADFG species of special concern	Neotropical migrants who breed in central Alaska in the summer. Habitat includes areas of boreal coniferous forest and woodland, mixed coniferous-deciduous second-growth, tall shrubs, and alder thickets.
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Recently delisted from federal Endangered Species Act; protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act	Found in and adjacent to the project area, and use available habitats for nesting, foraging, and roosting. No nesting sites are documented in the project area.

### 3.5.2 Threshold of Significance

The No Action and the Proposed Action alternatives were determined to result in a significant effect on fish or wildlife if they would:

- Have a significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the ADFG;
- Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, reduce the number or restrict the range of a state endangered, rare, or threatened species;
- Interfere substantially with the movement of any native resident or migratory wildlife or fish species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Cause mortality by land clearing activities;
- Conflict with the provisions of an approved local, regional, or state habitat conservation plan; or
- Conflict with any local policies or ordinances protecting wildlife resources, fish, or other aquatic life.

### 3.5.3 Environmental Consequences

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB. There would be negligible effects on fish and wildlife from human disturbance, and associated thresholds of significance would not be exceeded.

#### **Alternative B: Proposed Action**

Under the Proposed Action, construction activities (clearing and brushing, grubbing, excavation, and grading) would permanently displace approximately 10,000 square feet of vegetation, with the understory shrub layer and herb layer experiencing the most impact. The new cabin was specifically sited to avoid disturbing any large or significant trees in the project area.

Snags and downed wood are scarce in the project area, and there are few other habitat features noted specifically in the project area (Daniels 2008). Because of the lack of overall habitat diversity, small area of vegetation clearing for the project, and the lack of riparian or other aquatic habitat on the project site, the Proposed Action would have no significant impacts on wildlife due to habitat loss. In addition, because construction would not disturb the Deshka River or shoreline, fish and aquatic life would not be affected. The wood frog is the only amphibian or reptile species potentially present in the project area. The Proposed Action likely would have no impact on amphibians or reptiles because there is only low-quality wood frog habitat in the project area.

A variety of songbirds, including neotropical migrants, likely use the trees and shrubs in the project area to nest and forage. Most of these avian species likely would be found in higher densities in higher quality riparian habitats closer to the river and throughout less human-disturbed areas upstream and downstream of the project area. However, the removal of live trees, snags, or shrubs during construction of a new cabin would directly affect many songbird species by removing potential nesting or foraging habitat. These effects are considered to be insignificant because of the nearby location of higher quality habitat, the protection of significant trees in siting the new cabin, and the relatively small size of the area of impact compared to the ample availability of more suitable habitat surrounding the project site.

The removal of live trees or shrubs during construction of a new cabin would directly affect some of the small mammal species by removing potential habitat. These effects are considered to be insignificant because of the nearby location of higher quality habitat, the protection of significant trees in siting the new cabin, and the relatively small size of the area of impact compared to ample availability of more suitable habitat surrounding the project site.

The amount of land cleared under the Proposed Action is insignificant compared with the home ranges of large mammals that may use the area. As a result, there would be no effect on large mammals.

Overall, the removal of potential habitat on or adjacent to the project site is not expected to result in a significant effect on fish or wildlife. The Proposed Action would not have a significant adverse

effect on any special status species; most wildlife species potentially in the area would frequent nearby riparian/aquatic areas as their primary habitat and only would use habitat on the project site peripherally.

### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

## 3.6 Recreation

### 3.6.1 Affected Environment

The project area is located on land owned and managed by the MSB primarily for recreation. The Deshka River is a popular fishing destination and also provides moderately remote opportunities for boating, rafting, hunting, camping, snowmobiling, dog-mushing, and wildlife viewing. The MSB manages and maintains public campsites on the lower Deshka River. A campground is located near the mouth of the river with 21 campsites and 2 Americans with Disabilities Act (ADA) campsites (Figure 3.6-1). Each campsite is equipped with a picnic table, fire ring, and room for 1 or 2 tents (see the photos, below). The campground area includes communal public toilet facilities, trash receptacles, bear-proof food storage, and boat storage (MSB Undated). The campground is open for use during the primary fishing season from mid-May to mid-August. June is the most popular month with the most intensive use. Farther upstream, the MSB also manages primitive campsites that are available for public use.



**Communal Facilities**



**Campsite Facilities**

The Deshka River Stewards are based in a small cabin to maintain the campground and monitor fishing and other human activities on the lower Deshka River. The River Stewards are on-call, part-time MSB employees who manage recreation use in the project area. The River Stewards collect fees, haul garbage, empty portable toilets, and generally oversee summer recreation use along the lower Deshka River.

Fishing on the Deshka River is managed by fishing licenses issued by the ADFG. Sport fishing or personal use fishing requires an annual sport fishing license, and fishing for king salmon (i.e., Chinook) also requires a king salmon stamp. ADFG and other law enforcement agencies monitor fishing license compliance.

Dispersed recreation in the project area includes hunting, snowmobiling, and dog-mushing. These activities may occur throughout the MSB-managed lands surrounding and including the project site. There are no designated trails or groomed areas for winter activities or for hunting in the area.

The project site and the Deshka River are accessible by foot, boat, floatplane, and snowmobile. There are no roads to the project site, and one walking trail leads from the Deshka River shoreline to the project site.

Recreation use in the project vicinity is managed in accordance with the *Susitna Basin Recreation Rivers Management Plan* (DNR 1991). The plan includes general policies, goals, and management guidelines for recreation use in the Susitna River basin, addressing factors such as public ownership, recreation, fish and wildlife, public use, economic use, monitoring, education, and management. The Deshka River Steward's Cabin Replacement Project area is within Management Unit 2 (Deshka River/Kroto Creek/Moose Creek) as designated in the plan, which is managed as a Class II area (different management guidelines apply to different class areas in the plan). The stated management intent for the project area and surrounding lands are as follows:

The subunit will be managed to provide and enhance these recreation opportunities, and fish and wildlife habitat while accommodating uses associated with private lands. A limited number of commercial camps may be authorized. Maintaining public use sites will be a high priority... Borough lands in this subunit are classified "Public Recreation." (DNR 1991)

### 3.6.2 Threshold of Significance

The No Action and the Proposed Action alternatives were determined to result in a significant effect on recreation if they would:

- Increase the use of existing recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment;
- Have a substantial direct or indirect impact on the quantity or quality of recreational activities in the vicinity;

- Conflict with the policies, goals, or management intent as set forth in *Susitna Basin Recreation Rivers Management Plan* (DNR 1991).

### 3.6.3 Environmental Consequences

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB, although its presence and reliability would be reduced if the MSB is not able to adequately maintain or repair the cabin for seasonal occupation.

If the River Steward's cabin presence were reduced or curtailed due to deterioration or abandonment, recreation use would be adversely affected by reduced campground care and less regular monitoring of recreation use in the area. Unless mitigated to continue providing a comparable level of service, such effects would be considered a potentially significant adverse impact on recreation resources in the project area.

#### **Alternative B: Proposed Action**

Under the Proposed Action, the new River Steward's cabin would be constructed and seasonally occupied. The new cabin would be consistent with the surrounding recreation use, characterized by a few dispersed recreation structures on the surrounding properties. Minimal vegetation would be disrupted with the construction of the new cabin, and its setting would be consistent with the surrounding dispersed recreation use. The Deshka River Stewards would continue to manage recreation use in the area and maintain the campground. The presence of the River Steward's cabin would continue to positively affect the management of recreation resources in the project area. The Proposed Action represents a beneficial effect on the maintenance of recreation facilities and use in the project area. Implementation of the Proposed Action would represent a beneficial impact on recreation resources, and there would be no significant adverse impacts. In addition, the Proposed Action complies with the policies, goals, and management intent of the *Susitna Basin Recreation Rivers Management Plan*.

#### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

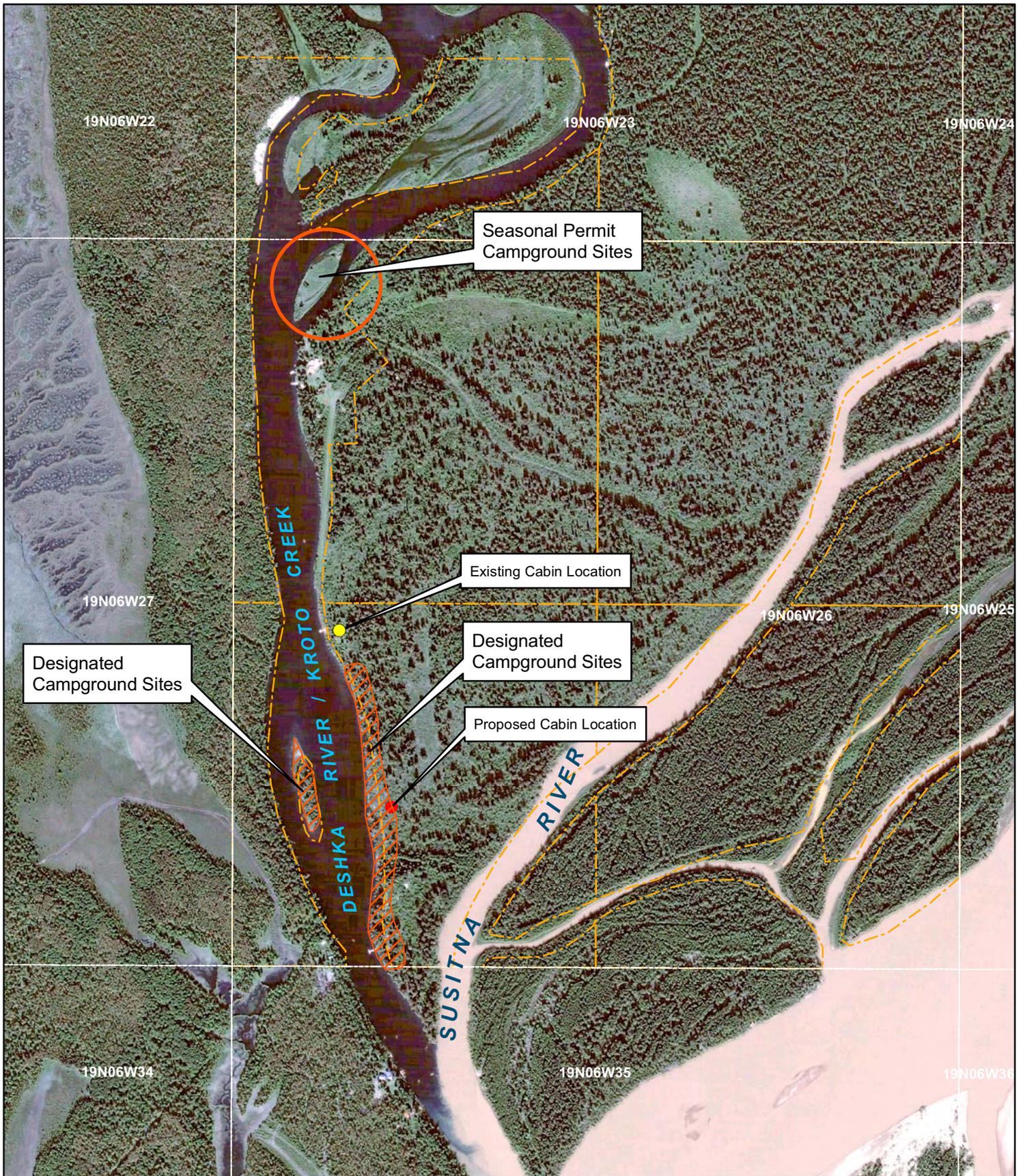
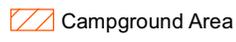
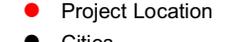
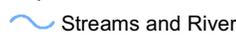
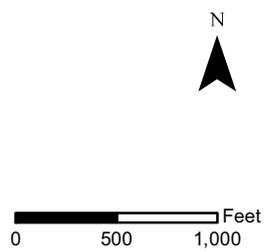


Figure 3.6-1. Recreation Sites near the Project Location

-  Campground Area
-  Project Location
-  Cities
-  Roads
-  Streams and Rivers

-  Township, Range, Section Lines
-  Matanuska-Sustina Borough Lands



## 3.7 Visual Resources

### 3.7.1 Affected Environment

The project area is located near the Deshka River in an open, forested alluvial floodplain. The surrounding landscape is visually similar to the project site, including heavy brush, scattered tall trees, and low, flat rolling topography. The project site and surrounding area form a relatively unbroken landscape of alluvial floodplain open forest.

Although the overall character of the forest is open, heavy brush (including dense alder and willow stands) obscure views of the project site from the riverbank. The project site also is not visible from surrounding landowners' properties, or from the nearby MSB campground sites.

Evidence of human presence in the vicinity of the project site includes recreation sites and private homes downstream of the project area. The campground sites, public recreation use areas, and boat access for private homes all involve clearing vegetation from the riverbank, and therefore cause such human uses to be visible from the river. These human elements disrupt the visual character of the immediate area but are insignificant at a landscape scale and in the context of a rural setting.

### 3.7.2 Threshold of Significance

The No Action and the Proposed Action alternatives were determined to result in a significant effect on visual resources if they would:

- Have a substantial adverse effect on a scenic vista or damage a scenic resource; or
- Substantially degrade the visual character of a site and its surroundings.

### 3.7.3 Environmental Consequences

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. The existing cabin would continue to be seasonally occupied and maintained and repaired as needed by the MSB.

If the River Steward's presence were reduced or curtailed, visual resources would experience minor effects due to the likely reduction in general campground maintenance activities, such as trash cleanup. However, such effects would be small, and the associated thresholds of significance would not be exceeded.

#### **Alternative B: Proposed Action**

Under the Proposed Action, the new Deshka River Steward's cabin would be constructed, and approximately 10,000 square feet of vegetation would be cleared. The new 2-story cabin would be visible from the trail leading to it, but would not be visible from the river because of the relatively dense shrubs and small trees in the area. Therefore, the construction of the cabin would not disrupt the scenic integrity of the natural, rural setting, nor would it degrade the visual character of the area, and the associated thresholds of significance would not be exceeded. Implementation of the Proposed Action would not result in any significant impacts on visual resources.

**Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

## 3.8 Environmental Justice

### 3.8.1 Affected Environment

Federal agencies are required, by Executive Order 12898 (Environmental Justice, 59 Fed. Reg. 7629 [1994]), to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects on minority and low-income populations." To do this, the demographics of the affected area are examined to determine whether minority populations, low income populations, or Indian tribes are present in the area impacted by a proposed action. If so, it must be determined whether implementing or developing the proposed project may cause disproportionately high and adverse human health or environmental effects on these populations.

The Council on Environmental Quality (CEQ) defines "minority" to consist of the following groups: Black/African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and Hispanic populations (CEQ 1997). Additionally, for the purposes of this analysis, "minority" also includes all other non-white racial categories within the U.S. Census Bureau's 2000 Census of Population and Housing such as "some other race" and "two or more races."

For the purpose of evaluating environmental justice impacts, the affected environment is defined as the Matanuska-Susitna Borough (MSB); statistics for the state of Alaska are provided for comparison. Table 3.8-1 lists the race and ethnicity of the MSB and Alaska state residents as reported by the 2000 U.S. Census of Population and Housing.

**Table 3.8-1. Race/Ethnicity in Matanuska Susitna Borough (MSB) and Alaska State, 2000.**

Race/Ethnicity	MSB (Percent)	Alaska State (Percent)
White	87.6	69.3
Black	0.7	3.5
American Indian and Alaska Native	5.5	15.6
Asian	0.7	4.0
Pacific Islander and Native Hawaiian	0.1	0.5
Some other race	0.9	1.6
Two or more races	4.6	5.4
Hispanic or Latino (of any race)	2.5	4.1

Source: U.S. Census Bureau 2004.

The U.S. Census Bureau's 2005 poverty estimates are used to determine low-income populations, defined by the Census Bureau as those households with income at or below 80 percent of the median household income. Estimated median household income in the MSB in 2005 was \$57,134; for Alaska as a whole, it was \$55,477 (U.S. Census Bureau 2005). In 2005, approximately 11.3 percent of the MSB lived below the poverty threshold (i.e., below \$45,707), compared to 10.8 percent of the population of Alaska as a whole (i.e., below \$44,382).

### 3.8.2 Threshold of Significance

To define what constitutes a significant proportion of the population, the analysis presented in this EA followed the EPA guidelines published in *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis* (EPA 1998). According to these guidelines, a minority population refers to a minority group that has a population of greater than 50 percent of

the affected area's general population. Although not specifically stated in the text, the same rule is used in this analysis for low-income populations; a low-income population exists if there is a community whose general population comprises 50 percent or more people living under the poverty threshold. Therefore, the No Action and the Proposed Action alternatives were determined to result in a significant effect on environmental justice if they would:

- Include a minority group with a population of greater than 50 percent of the affected area's general population; or
- Include a population with 50 percent or more of its residents living under the poverty threshold; and
- The alternative would result in a “disproportionately high and adverse impact” on either or both of these populations

### **3.8.3 Environmental Consequences**

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. Site conditions would not be altered. Data provided in Section 3.8.1 indicate that neither minority populations nor low-income populations constitute a significant proportion of the population within the affected environment. Therefore, there would be no disproportionate impacts on minority or low-income populations.

#### **Alternative B: Proposed Action**

Under the Proposed Action, the new Deshka River Steward's cabin would be constructed. The Proposed Action would provide equal-opportunity employment opportunities, as the MSB would contract for cabin construction services using its standard bidding procedures. Data provided in Section 3.8.1 indicate that neither minority populations nor low-income populations constitute a significant proportion of the population within the affected environment. Therefore, there would be no disproportionate impacts on minority or low-income populations. Implementation of the Proposed Action would not result in significant adverse impacts on environmental justice.

#### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative.

## 3.9 Cultural and Historical Resources

In developing the Area of Potential Effect (APE) for an undertaking, consideration must be given to those effects that would occur immediately and directly as well as those that are reasonably foreseeable and may occur later, are farther removed in distance, or are cumulative, but might still result from the undertaking. Areas immediately and directly affected by the Proposed Action include those areas within the project footprint. The APE for the Proposed Action has been defined to include the approximately 10,000-square-foot site of the new River Steward's cabin and associated facilities.

### 3.9.1 Affected Environment

Cultural resources include resources of historical and/or archaeological significance. For the purposes of this document, the term "archaeological resources" is used to refer to prehistoric or historic subsurface sites or objects, and the term "historic resources" is used to refer to historic structures and districts.

The project vicinity has several known archaeological sites attributed to the Dena'ina people, an Athabaskan native group who occupied a village farther upstream until 1936 (Kari and Fall 1987). The Dena'ina were primarily hunters and fishermen, and used a wide variety of subsistence techniques. Several types and sizes of cache pits, used for storing, preserving, and fermenting food, are commonly found along the river, which was used for winter hunting and fishing (Kari and Fall 1987), and throughout the Cook Inlet and Matanuska and Susitna valleys, where the Dena'ina historically resided. Many cache pits are known in the area, and several known archaeological sites are within 1 mile of the proposed project site.

According to correspondence (November 18, 2008) received from the Alaska State Historic Preservation Office (SHPO), its records show three Alaska Heritage Resources Survey (AHRS) sites within 1 mile of the proposed cabin site east of the Kroto River (i.e., Deshka River):

- TYO-001 (former Dena'ina village): located approximately  $\frac{3}{4}$  mile south of the proposed cabin;
- TYO-078 (prehistoric cache pits): on the opposite (west) bank of Kroto River from the proposed cabin; and
- TYO-079 (prehistoric house depression and cache pits): on the opposite (west) bank of Kroto River from the proposed cabin.

The MSB archaeologist surveyed an area of approximately 7 acres that included the APE and observed previously unreported cache pits a minimum of 150 feet from the footprint of the proposed cabin in an area of shrub vegetation. The APE is approximately 10,000 square feet. The survey revealed the presence of several undocumented cache pits, consistent with the "stinky-head soup" size used by Dena'ina to ferment meat and fish into a delicacy. The SHPO has determined that these pits should be assigned a separate AHRS number (TYO-190) because they are on the east side of the Kroto River.

Based on the findings of the consultation and the survey, FEMA prepared an Archaeology Survey Report (ASR) (FEMA 2009) and submitted the report to the SHPO for their review and concurrence.

The SHPO has reviewed the ASR and concurred with FEMA's findings. In a letter dated March 20, 2009, the SHPO stated "Provided that TYO-190 is avoided during construction and subsequent use of the cabin, we concur with your finding of no historic properties affected."

### **3.9.2 Threshold of Significance**

The National Historic Preservation Act (specifically, Section 106), the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act provide guidance for addressing potential effects on cultural resources. General guidance also is provided by Alaska's Historic Preservation Plan (DNR 2008). The unanticipated discovery of previously unreported cultural resources during project work would trigger additional consultation with the Alaska SHPO and tribal interests under the appropriate laws and implementing regulations.

### **3.9.3 Environmental Consequences**

#### **Alternative A: No Action**

Under the No Action Alternative, FEMA would not fund a new River Steward's cabin, and there would be no construction or related activities. No ground disturbance or clearing would occur, and previously unreported cultural resources are unlikely to be present within the APE. Although the MSB would continue to conduct minor maintenance and repair as needed, the No Action Alternative would have no significant effect on cultural resources, and associated thresholds of significance would not be exceeded.

#### **Alternative B: Proposed Action**

Under the Proposed Action, approximately 10,000 square feet would be cleared, and the new River Steward's cabin would be constructed and seasonally occupied. Construction activities (clearing and brushing, grubbing, excavation, and grading) would disturb approximately 10,000 square feet of soil around the new cabin location and within the clearing limits. The identified cultural resources are located outside the proposed clearing limits and APE in an area of shrub vegetation. Their locations are not apparent to the untrained observer. The level of activity at the site would not change from the current condition and is not planned for areas with identified cultural resources. The SHPO and tribes would be notified, and consulted with, if cultural resources were discovered during project construction. However, the possibility of effects on cultural resources is considered very unlikely since the MSB archaeologist has surveyed the area and has not identified cultural resources within the APE. No significant adverse effects are anticipated and the associated thresholds of significance would not be exceeded.

#### **Mitigation Measures and Residual Impacts**

NEPA requires the identification of reasonable mitigation to alleviate the environmental effects of a proposed action. No mitigation measures are proposed under either alternative. The MSB would implement its standard construction BMPs. If cultural resources were encountered during construction, all ground-disturbance would be stopped and the SHPO would be contacted.

### 3.10 Cumulative Impacts

Cumulative impacts are those that result from the incremental effect of a proposed action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other action (40 CFR 1508.7). Only those resources associated with cumulative effects are described below.

Potential cumulative effects from the Proposed Action added to other activities in the area would result primarily from vegetation clearing and soil disturbance. These activities could have minor cumulative effects on soils, hydrology and water quality, vegetation, fish and aquatic life, and general wildlife.

The land surrounding the project site is primarily publicly owned, with a few privately owned parcels along the riverbank. These surrounding lands are mostly undeveloped forest and shrub, with a few private and public recreation sites and isolated structures (e.g., cabins, stairs, and docks). Although the project would result in the clearing of approximately 10,000 square feet of vegetation and incidental soil disturbance and a corresponding loss of local habit, its cumulative contribution during construction would be minor, and cumulative effects over the long term would be negligible.

Long-term seasonal occupation of the new cabin to manage surrounding recreation lands would continue consistent with the existing management activities, and there would be no cumulative effect.



## 4.0 Consultation and Coordination

### 4.1 Public Involvement

FEMA sent a scoping letter to agencies, tribes, and local interested parties on October 16, 2008. The letter provided a description of the proposed project and requested comments on issues and concerns, the range of alternatives, and potential impacts regarding the project. Section 1.7 provides an overview of the scoping comments received. The scoping letter distribution list and a summary of received comments are found in Appendix A.

#### 4.1.1 Comments on the Draft EA

FEMA's Draft EA will be released for public review in early 2009. The public will be afforded 30 days to review and provide comments on the Draft EA.

### 4.2 Agency Consultation and Coordination

FEMA consulted with several federal and local agencies throughout the EA process to gather valuable input and to meet regulatory requirements. This coordination was integrated with the public involvement process.

#### 4.2.1 Endangered Species Act

No federally listed or proposed threatened or endangered species occur in the vicinity, and NOAA Fisheries also responded to project scoping and concluded that the Proposed Action would not adversely affect EFH or other resources of concern. This fulfills FEMA's requirement to evaluate effects on federally listed species. Preparation of a separate biological assessment is not necessary.

#### 4.2.2 National Historic Preservation Act

During the scoping process, FEMA contacted the Alaska SHPO and requested that it inform FEMA about known cultural resources or other important sites in the vicinity of the project. As summarized in Section 3.9, the SHPO has records of three AHRS sites within 1 mile of the proposed cabin site east of the Deshka River. The SHPO has no record of cultural resources in the APE, although they had previously received general information about the resources in the project area. SHPO's concurrence with FEMA's determination of "no historic properties affected" (letter dated March 20, 2009) fulfills FEMA's consultation requirements.

#### 4.2.3 Other Laws and Regulations

The relationship between federal agencies and sovereign tribes is defined by several laws and regulations addressing the requirement of federal agencies to notify or consult with Native American groups or otherwise consider their interests when planning and implementing federal undertakings. Among these are the following:

- National Environmental Policy Act
- Executive Order 12875, Enhancing the Intergovernmental Partnership

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Presidential Memorandum: Government-to-Government Relations with Native American Tribal Governments
- Executive Order 13084, Consultation and Coordination with Indian Tribal Governments

The two tribes in the project vicinity include the Native Village of Eklutna (in Chugiak) and the Knik Tribe (in Wasilla). FEMA contacted these tribes about any Native cultural resources in the project area. Neither tribe contacted FEMA about potential cultural resource concerns in the area. FEMA has adhered to these laws and regulations as applicable to the development of the EA.

Other Executive Orders that apply include the following:

- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands

## 5.0 Preparers

The Draft EA for the Deshka River Steward's Cabin Replacement Project was prepared by FEMA and its consultant, EDAW, Inc. Key individuals responsible for the preparation of the EA are listed below.

### **FEMA**

Jerry Creek, Environmental Specialist

### **EDAW, Inc.**

Jan Mulder (Senior Environmental Planner), Project Manager

Jim Keany (Senior Ecologist), Senior Reviewer

Sarah Daniels (Environmental Planner and GIS Analyst), Primary Author

Peter Carr, Technical Editor and Production Manager



## 6.0 Distribution

### Federal Agencies

U.S. Fish and Wildlife Service  
Attn: Frances Mann  
605 West 4th Avenue, Room G-61  
Anchorage, AK 99501

NOAA Fisheries' National Marine Fisheries Service  
Attn: LT Jonathan Taylor  
222 West 7th Avenue, Box 43  
Anchorage, AK 99513

U.S. Army Corps of Engineers  
Department of the Army, U.S. Army Engineer District  
Alaska Regulatory Division  
Attn: LeRoy Phillips  
P.O. Box 6898  
Elmendorf AFB, AK 99506-0898

U.S. Department of Homeland Security  
FEMA Region X  
Attn: Charles Diters, Historic Preservation Specialist  
130 228th Street SW  
Bothell, WA 98021-9796  
(907)764-0062

### State Agencies

State of Alaska  
Department of Fish and Game  
Attn: Cindy Satterfield  
Division of Habitat  
1800 Glenn Highway, Suite 12  
Palmer, Alaska 99654-6736

Alaska Department of Natural Resources  
Division of Mining, Land and Water  
Attn: Dick Mylius  
550 West 7<sup>th</sup> Avenue, Suite 1070  
Anchorage, AK 99501-3562

Alaska Division of Homeland Security & Emergency Management  
Department of Military and Veteran Affairs  
Attn: Mark Passmore  
PO Box 5750  
Ft. Richardson, AK  
99505-5750

State of Alaska  
Department of Environmental Conservation  
Anchorage Office  
555 Cordova Street  
Anchorage, AK 99501-2617

Alaska Office of History and Archaeology  
Attn: Judith Bittner, State Historic Preservation Officer  
550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, AK 99501-3565

### **Tribal Governments**

Native Village of Eklutna  
Attn: Dorothy Cook, President  
26339 Eklutna Village Road  
Chugiak, AK 99567

Knik Tribal Council  
Attn: Michael Tucker, President  
P.O. Box 871565  
Wasilla, AK 99687

### **Matanuska-Susitna Borough**

Matanuska-Susitna Borough  
Attn: Dan Keyes, Recreational Services Division Manager  
350 E. Dahlia Avenue  
Palmer, AK 99645

Matanuska-Susitna Borough  
Attn: Fran Seager-Boss, Cultural Resources Specialist  
350 E. Dahlia Avenue  
Palmer, AK 99645

Matanuska-Susitna Borough  
Attn: Warren Templin  
350 E. Dahlia Avenue  
Palmer, AK 99645

## 7.0 References

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## **Appendix A – Scoping Letter and Comments Received**





FEMA

October 16, 2008

Ms. Frances Mann  
U.S. Fish and Wildlife Service  
605 West 4th Avenue, Room G-61  
Anchorage, Alaska 99501

Subject: Scoping of Issues – Proposed Replacement of the Deshka River Recreation Area Steward’s Cabin in the Matanuska-Susitna Borough (DR-1663-AK PW-73-1).

Dear Ms. Mann:

The Department of Homeland Security’s Federal Emergency Management Agency (FEMA) is proposing to support the Matanuska-Susitna Borough (MSB) by providing partial funding to replace a damaged Recreation Area Steward’s Cabin. The small (16-foot x 16-foot) steward’s cabin was submerged under 5 feet of water due to flooding caused by severe rain during the period August 15 to August 25, 2006. The MSB and FEMA have determined it is not reasonable to rebuild the cabin at the existing location. The MSB has requested FEMA consider funding an “Improved Project” to replace the cabin at a new, higher location. The proposed location remained dry during the August 2006 event. The new site is approximately 1,200 feet southeast of the existing cabin on the peninsula extending between the mouth of the Deshka River and the Susitna River. The new cabin site is located in Section 26, T19N, R06W, S.M., Alaska. The approximate coordinates are N 61° 42’ 26.0”, W 150° 19’ 21.8” (see attached figure for location).

The purpose of this letter is to invite you to participate in the “Scoping Process” by reviewing the initial proposal as outlined in this letter and providing comments to support the development of an Environmental Assessment (EA). The National Environmental Policy Act (NEPA) requires FEMA to evaluate the impacts of this proposed action on the human and natural environments. FEMA intends to develop an EA for the action of constructing and operating a cabin in a new location. We are asking your assistance to identify issues and concerns, develop alternatives to the cabin relocation, and identify potential impacts of implementing this project.

The purpose of this project is to provide FEMA–Public Assistance funding to the MSB to replace the steward’s cabin at a higher elevation. The MSB needs to maintain a steward’s cabin that is available each summer season as a base of operations to manage heavy public use of MSB recreation lands along the Deshka River.

Ms. Frances Mann  
October 16, 2008  
Page 2

The MSB preferred alternative would consist of constructing a small (20-foot x 24-foot) cabin on higher ground. The new cabin would be elevated on pilings another 5 to 6 feet above the ground. A portable toilet would be located nearby. Grey water from the kitchen sink would be drained to a holding tank. Both the portable toilet and grey water holding tank would be pumped regularly throughout the summer. Clearing would be the minimum necessary for construction and to meet standards for wildfire mitigation.

The MSB also intends to construct a small (12-foot x 12-foot) storage building. Because FEMA would not fund the storage building, it is not part of preferred alternative. Rather, the storage building is considered a connected action. There may be deviations to the preferred alternative depending on comments and other alternatives, if any, identified through the Scoping Process or the development of the EA.

Your written comments or, if your agency has no comments, a written confirmation of receipt of this notice stating that your agency has no comments to contribute on this proposal during the project scoping phase (comments must be received by November 21, 2008) should be sent to FEMA's consultant:

Jan Mulder – Jan.Mulder@edaw.com  
EDAW  
815 Western Avenue, #300  
Seattle WA, 98104

If you have questions about this letter, the project, or if you want to receive a copy of the Draft EA for review and comment please feel free to contact Jerry Creek, Environmental Specialist, via email ([jerry.creek@dhs.gov](mailto:jerry.creek@dhs.gov)) or phone (425-482-3748), or me via email ([mark.eberlein@dhs.gov](mailto:mark.eberlein@dhs.gov)) or phone (425-487-4735).

Sincerely,

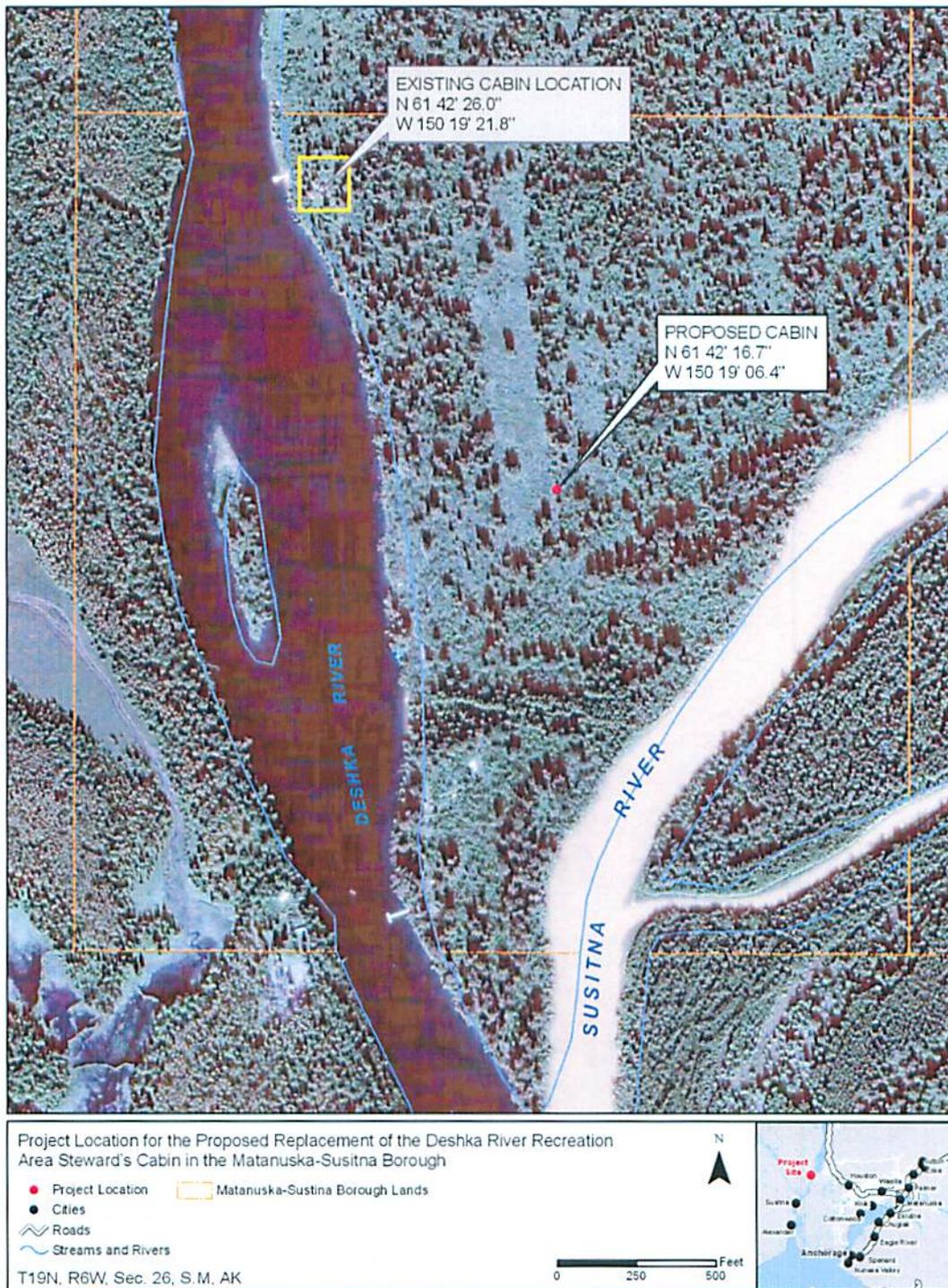


Mark Eberlein  
Regional Environmental Officer

Enclosures: Map  
Distribution List

JC:bb

Figure: Proposed Site Location



**Deshka River Steward Cabin Replacement Environmental Assessment  
Scoping Letter Distribution List**

**Federal Agencies**

U.S. Fish and Wildlife Service  
Attn: Frances Mann  
605 West 4th Avenue, Room G-61  
Anchorage, AK 99501

NOAA Fisheries' National Marine Fisheries Service  
222 West 7th Avenue, Box 43  
Anchorage, AK 99513

U.S. Army Corps of Engineers  
Department of the Army, U.S. Army Engineer District  
Alaska Regulatory Division  
Attn: LeRoy Phillips  
P.O. Box 6898  
Elmendorf AFB, AK 99506-0898

**State Agencies**

Alaska Department of Fish and Game  
Attn: Mike Daigneault, Division Manager  
333 Raspberry Road  
Anchorage, AK 99518

Alaska Department of Natural Resources  
Attn: Dick Mylius, Division of Mining, Land and Water  
550 West 7<sup>th</sup> Avenue, Suite 1070  
Anchorage, AK 99501-3562

State of Alaska, Department of Environmental Conservation  
Anchorage Office  
555 Cordova Street  
Anchorage, AK 99501-2617

Alaska Office of History and Archaeology  
Attn: Judith Bittner, State Historic Preservation Officer  
550 West 7<sup>th</sup> Avenue, Suite 1310  
Anchorage, AK 99501-3565

## **Tribal Governments**

Native Village of Eklutna  
Attn: Dorothy Cook, President  
26339 Eklutna Village Road  
Chugiak, AK 99567

Knik Tribal Council  
Attn: Michael Tucker, President  
P.O. Box 871565  
Wasilla, AK 99687

## **Matanuska-Susitna Borough**

Matanuska-Susitna Borough  
Attn: Dan Keyes, Recreational Services Division Manager  
350 E. Dahlia Avenue  
Palmer, AK 99645

Matanuska-Susitna Borough  
Attn: Fran Seager-Boss, Cultural Resources Specialist  
350 E. Dahlia Avenue  
Palmer, AK 99645

Matanuska-Susitna Borough  
Attn: Warren Templin  
350 E. Dahlia Avenue  
Palmer, AK 99645



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

November 03, 2008

Jan Mulder  
EDAW  
815 Western Avenue, #300  
Seattle, WA 98104

Re: Scoping Letter Deshka River  
Recreation Area Cabin

Dear Ms. Mulder:

The National Marine Fisheries Service (NMFS) has reviewed the above scoping letter regarding a proposal by the Federal Emergency Management Agency to replace a flood-damaged Deshka River Recreation Area steward's cabin. The new cabin will be located approximately 1,200 feet from the existing cabin, and on ground that was elevated so as to avoid inundation from a flood comparable to the 2006 flood that damaged the existing cabin.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act requires federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. NMFS has reviewed the scoping letter from FEMA regarding the building of a new cabin for the Matanuska-Susitna Borough. The proposed action will not result in adverse effects to EFH or other resources of concern to NMFS and we have no objection to the project.

Thank you for the opportunity to comment. LT Jonathan Taylor is the NMFS contact for this project and can be reached by telephone at (907) 271-2373, or by e-mail at [jonathan.e.taylor@noaa.gov](mailto:jonathan.e.taylor@noaa.gov) if any questions arise.

Sincerely,

Robert D. Mecum

Acting Administrator, Alaska Region

cc: Applicant – Jan Mulder@edaw.com  
jerry.creek@dhs.gov\*  
mark.eberlein@dhs.gov\*

\* e-mail PDF



# STATE OF ALASKA

**DEPARTMENT OF MILITARY  
AND VETERANS AFFAIRS  
DIVISION OF HOMELAND SECURITY  
AND EMERGENCY MANAGEMENT**

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November 21, 2008

Ms. Jan Mulder  
EDAW  
815 Western Avenue, #300  
Seattle, WA 98104

Subject: Scoping of Issues – Proposed Replacement of the Deshka River  
Recreation Area Steward's Cabin in the Matanuska-Susitna Borough  
(DR-1663-AK PW-73-1)

Dear Ms. Mulder:

The State of Alaska Division of Homeland Security and Emergency Management (DHS&EM) received the Scoping of Issues letter, dated October 16, 2008 on October 22, 2008. DHS&EM has no comments regarding the proposed relocation of the Steward's Cabin out of the existing flood plain. By relocating the Steward's Cabin, this would prevent future damages in a like event and also make for a safe work environment for those using the cabin.

If you have any questions about this letter, please feel free to contact me via email ([mark.passmore@alaska.gov](mailto:mark.passmore@alaska.gov)) or phone (907-428-7053).

Sincerely,



Mark L. Passmore  
State Public Assistance Officer  
DR-1663-AK

CC: Mark Eberlein; Regional Environmental Officer; FEMA Region X

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

### DIVISION OF PARKS AND OUTDOOR RECREATION

#### OFFICE OF HISTORY AND ARCHAEOLOGY

SARAH PALIN, GOVERNOR

550 W. 7TH AVENUE, SUITE 1310  
ANCHORAGE, ALASKA 99501-3565  
PHONE: (907) 269-8721  
FAX: (907) 269-8908

November 18, 2008

File No.: 3130-1R FEMA

SUBJECT: Replacement of steward's cabin at Deshka River Recreation Area  
FEMA# DR-1663-AK, PW 73-1

Mark G. Eberlein  
Regional Environmental Officer  
Department of Homeland Security, Region X  
130 228<sup>th</sup> Street, SW  
Bothell, WA 98021-9796

Dear Mr. Eberlein,

The Alaska State Historic Preservation Office (SHPO) received your correspondence regarding the referenced project on October 6 (Section 106 consultation) and October 20, 2008 (Scoping under NEPA). We have reviewed your undertaking under Section 106 of the National Historic Preservation Act.

According to our records, there are three Alaska Heritage Resources Survey (AHRs) sites within one mile of the proposed cabin east of the Kroto River:

- TYO-001 (former Dena'ina village): located ca. ¼ mile south of proposed cabin
- TYO-078 (prehistoric cache pits): opposite (west) bank of Kroto River from proposed cabin
- TYO-079 (prehistoric house depression and cache pits): opposite (west) bank of Kroto River from proposed cabin.

We understand from your Section 106 consultation letter, that the project area was surveyed by archaeologist Fran Seager-Boss. The archaeologist observed previously unreported cache pits near but outside the proposed cabin footprint. Since these cache pits are on the east side of the Kroto River, they should be assigned a separate AHRs number.

We will need to review the full survey report before we can concur with your finding of project effect. The report should include the following information:

- Clarify if the archaeologist conducted any subsurface testing;
- More detailed survey map;
- Completed AHRs form for the newly reported ~~of~~ cache pits.

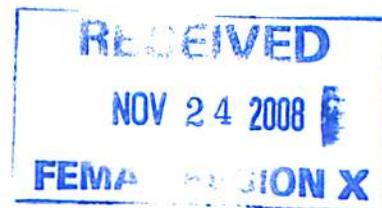
Please contact Stefanie Ludwig at 269-8720 if you have any questions or if we can be of further assistance.

Sincerely,

*Jean M. Antonson*

Judith E. Bittner  
State Historic Preservation Officer  
JEB:sll

*Deputy*



## Comments Received via Email from ADFG:

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**From:** Satterfield, Cynthia R (DFG) [mailto:cynthia.satterfield@alaska.gov]  
**Sent:** Thursday, October 30, 2008 4:30 PM  
**To:** Creek, Jerry; Eberlein, Mark  
**Cc:** Daigneault, Michael J (DFG)  
**Subject:** Scoping of Issues -- Proposed Replacement of the Deshka River Recreational Area Steward's Cabin in the Mat-Su Borough (DR-1663-AK PW-73-1)

Please be advised that this office will be participating in the scoping process on the subject project. Please send future correspondence to the following address:

State of Alaska  
Department of Fish and Game  
Division of Habitat  
1800 Glenn Highway, Suite 12  
Palmer, Alaska 99654-6736

You can also reach us at the following numbers:

Fax: 907-745-7369  
Office: 907-746-7363  
Admin: 907-761-3855

Please contact me if you have any questions.

*Cindy*

Cindy Satterfield, Admin Clerk  
Habitat, Mat-Su Office  
(907) 761-3855

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**From:** Satterfield, Cynthia R (DFG) [mailto:cynthia.satterfield@alaska.gov]  
**Sent:** Thursday, October 30, 2008 4:30 PM  
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Please contact me if you have any questions.

*Cindy*

Cindy Satterfield, Admin Clerk  
Habitat, Mat-Su Office  
(907) 761-3855

## Comments Received via Email from AK DEC:

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**From:** Cherry, Kyle J (DEC) [mailto:kyle.cherry@alaska.gov]

**Sent:** Friday, October 24, 2008 2:30 PM

**To:** Mulder, Jan

**Cc:** Rieth, William R (DEC)

**Subject:** Deska River Recreation Area Steward's Cabin, Matanuska-Susitna Borough, DR-1663-AK PW-73-1

Jan,

Plans for the gray water holding tank for the proposed steward's cabin must be reviewed and approved by this office prior to construction.

If the holding tank is located underground in the ground water, it must be ballasted to prevent floating of the tank by the ground water. If the tank is located above ground and it is felt that the tank is within the BFE it should be anchored to prevent flotation by floodwaters.

We have worked closely with the Matanuska-Susitna Borough on similar projects and am sure they are aware of these requirements.

Kyle J. Cherry, P.E.  
Environmental Engineer II

AK Dept. of Env. Cons.  
Building B, Suite 103  
1700 East Bogard Road  
Wasilla, Alaska, 99654

Phone: (907) 376-1872

Fax (907) 376-2382