

DRAFT ENVIRONMENTAL ASSESSMENT  
GRAVEL EXTRACTION AND SITE REHABILITATION, MYSTERY  
CREEK ACCESS ROAD REALIGNMENT, AND  
TEMPORARY OCCUPANCY



U.S. FISH AND WILDLIFE SERVICE  
KENAI NATIONAL WILDLIFE REFUGE

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## 1. INTRODUCTION

The Alaska Department of Transportation and Public Facilities (DOT&PF), in coordination with the Federal Highway Administration, plans to rehabilitate the Sterling Highway between Milepost (MP) 58 and 79 (Project No. 0A3/54490). The 21-mile-long project corridor is located in the Kenai Peninsula Borough between the communities of Cooper Landing to the east and Sterling to the west (Figure 1) and bisects the Kenai National Wildlife Refuge. Approximate center-of-project coordinates, according to the United States Geological Survey (USGS) topographical map Kenai C-1 SW, are Latitude 60.541667° N, Longitude 150.398333° W. The majority of Project activities will occur within a DOT&PF held 300-foot wide Right-of-Way (ROW) on the KNWR.

Sterling Highway MP 58-79 is a 3R (Resurface, Restoration, and Rehabilitation) project. Its primary objectives are to restore the structural integrity of the existing roadway, thereby extending the service life, and to improve the safety and capacity of the roadway. Reducing environmental impacts is a project goal as well, driven in part by the project's location within the Kenai National Wildlife Refuge (Refuge). The project will be designed to be cost-effective and compliant with current design standards and to meet the needs of the traveling public through design year 2032.

The Sterling Highway MP 58-79 Project proposes various improvements to meet the design objectives. The service life of the highway will be extended by repaving the existing highway; repairing, replacing, or extending existing drainage culverts; and adding passing lanes. Safety will be improved by widening the paved shoulders, improving guardrail protection, restriping, and minimizing moose browse. Several underpasses will also be included in the project design to serve as terrestrial wildlife crossings, which will aid in reducing long-term environmental impacts of the highway and will contribute to increased driver safety by potentially reducing moose-vehicle interactions. A Categorical Exclusion, to be approved by the FHWA, is being prepared by DOT&PF to meet compliance requirements of the National Environmental Policy Act for the Project.

Associated design elements of the Project will include:

- New passing lanes at three locations in the eastbound and westbound directions;
- Improving 22 horizontal curves to meet design standards for new construction;
- A new bridge over the East Fork of the Moose River;
- Five terrestrial wildlife crossing underpass culverts;
- Upgrading signage, striping, and guardrail;

- Revising fill slopes within the clear zone and eliminating guardrail where possible, based on a cost-effectiveness analysis; and
- Improving cross-connectivity for hydrology and repairing/replacing culverts where needed

The Kenai National Wildlife Refuge (Refuge) has been coordinating with the DOT&PF on the Sterling Highway MP 58-79 Project, including providing technical assistance for the design and placement of wildlife crossings to facilitate wildlife movement. Refuge objectives include reducing the habitat fragmentation effects of the expanded highway by ensuring that wildlife including moose, caribou, black and brown bears, wolves and lynx can continue to move across landscapes and enhancing public safety by reducing wildlife-vehicle collisions.

In support of meeting these objectives, the Refuge is proposing additional activities associated with the Sterling Highway MP 58-79 Project but outside of the DOT&PF ROW. The following activities are being evaluated in this Environmental Assessment: 1) contributing gravel from an existing on-Refuge material site at Mile 63.4 for project construction to facilitate installation of a planned wildlife undercrossing, followed by site reclamation; 2) realigning a section of the Mystery Creek Road and relocating its intersection with the Sterling Highway to enhance traffic safety; and 3) permitting temporary occupancy of the material site during project construction.

## **2. PURPOSE AND NEED FOR ACTION**

Based on observations made by Alaska Department of Fish and Game (ADF&G) biologists in the Anchorage area (Jessie Coltrane, ADF&G, pers. comm.), a minimum 16-ft vertical clearance is recommended for wildlife undercrossing structures to accommodate the passage of moose. The bridge over the East Fork of the Moose River to be constructed as part of the Sterling Highway MP 58-79 Project was designed with an 18-ft clearance (Figure 1). To increase use of the bridge underpass by moose and caribou and to minimize wildlife-vehicle collisions along a section of the Sterling Highway being expanded to four lanes which includes the sizeable bend in the highway between MP 72-73 near Lily Lake, (see Ernst *et al.* 2009), a fence will extend along both sides of the highway from the bridge (MP 71.4) westward for 2 miles to approximately Mile 73.4, where a second wildlife undercrossing will be installed. To maximize use of this undercrossing by moose and caribou, the Refuge is proposing to contribute approximately 150,000 cubic yards of gravel from an existing on-Refuge material site located at Mile 63.4. This contribution of gravel for use on the Sterling Highway MP 58-79 Project would allow installation of a 23-ft by 16-ft wildlife undercrossing at the Mile 73.4 site (labeled 6.1 in Figure 1) by offsetting costs not covered in the Project budget.

The existing Mile 63.4 material site is currently almost completely devoid of vegetation. Following Project construction, the entire material site would be reclaimed through sloping of

banks, replacement of organic substrate and reseeded with native grasses. This will facilitate the Refuge's long-term objective of restoring forest habitat on this site.

In addition, the Refuge is proposing the realignment of the southernmost section of the existing Mystery Creek Road so as to relocate its ingress/egress intersection with the Sterling Highway (currently at MP 64) to a safer location (Noble 2015b)(Figure 2). The current gated intersection is located in the center of a horizontal curve of the Sterling Highway making it difficult to see, and unsafe to access/exit off of the highway. In addition, the existing Mystery Creek Road/Sterling Highway intersection is located near the terminus of an eastbound passing lane to be constructed as part of the Sterling Highway MP 58-79 Project. To enhance traffic safety, the new intersection would be relocated approximately 0.6 miles eastward to Mile 63.4.

Lastly, the Refuge would permit temporary occupancy of the existing material site at Mile 63.4 for equipment staging and an asphalt plant to be used during construction of the Sterling Highway MP 58-79 Project.

## **2. ALTERNATIVES CONSIDERED**

### **2.1 Alternative A: CURRENT SITUATION (NO ACTION)**

Under Alternative A, a smaller wildlife undercrossing (16'x16' culvert with 14' clearance) would be installed at the Mile 73.4 location. No new materials would be extracted from the existing Mile 63.4 material site and no reclamation of the site would occur. The entrance to Mystery Creek Road and its intersection with the Sterling Highway would not be relocated; and temporary occupancy of the material site for activities supporting construction of the Sterling Highway MP 58-79 Project would not be permitted.

### **2.2 Alternative B: PREFERRED ALTERNATIVE**

Under Alternative B, a larger culvert undercrossing providing a 16' vertical clearance would be installed at the MP 73.4 location.

Approximately 150,000 cubic yards of gravel would be extracted from an existing on-Refuge material site, which would be expanded by approximately 5.5 acres, and used on the Sterling Highway MP 58-79 Project. A Mining and Reclamation Plan governing these activities would be developed and included as a condition of a Refuge-issued Special Use Permit prior to work being authorized.

Also under this Alternative, a segment of the Mystery Creek Road would be rerouted and its intersection with the Sterling Highway relocated from its current location eastward to the existing material site at MP 63.4. The rerouting of Mystery Creek Road east of its current

alignment would occur along approximately 2,400 feet of a bulldozed fire suppression line with the remaining additional 800 feet being located within the existing MP 63.4 material site.

Following project construction, the entire material site at MP 63.4 and the 725-foot abandoned section of the current Mystery Creek roadbed would be reclaimed. Reclamation activities to be conducted as part of the Sterling Highway MP 58-79 Project would include: 1) contouring the material site to reduce steep side slopes and eliminate the bowl effect; 2) adding organic materials from the expanded material site and undisturbed areas along the Project corridor. These organic materials will be stockpiled and utilized in the reclamation process and will provide the base needed to re-establish and maintain vegetation; and 3) reseeding the entire area with native plant seeds. Over the long term, the Refuge intends to restore forest habitat in all suitable areas of the reclaimed material site.

Under Alternative B, a small public parking area will be established off of the new Mystery Creek Road entrance within the existing material site, and a small clearing will be maintained for helicopter landings. The parking and helipad areas will encompass approximately 3.9 acres of the material site. All reasonable attempts will be made to maintain public access to the Mystery Creek Road throughout the project timeline.

The existing material site at MP 63.4 would be used as a staging area for stockpiled materials and various equipment supporting construction of the Sterling Highway MP 58-79 Project (i.e. pipe, guardrail, traffic control devices, contractor's equipment, trucks, culverts, fuels and lubricants), and for an asphalt plant.

Under Alternative B, all areas used for material extraction, equipment staging and the asphalt plant would be stabilized to meet the requirements of the Alaska Pollutant Discharge Elimination System (APDES) program. The Refuge-issued Permit would cover temporary occupancy of the material site. Special conditions would be incorporated in the Permit to protect water quality and other Refuge resources.

### 2.3 OTHER ALTERNATIVES CONSIDERED AND DISMISSED

Utilization of other existing material sites along the Sterling Highway was considered but dismissed because insufficient material exists at the sites. Establishing an entirely new material site, outside of existing previously used material sites, was also dismissed due to the greater impacts to habitats and other Refuge resources than use .

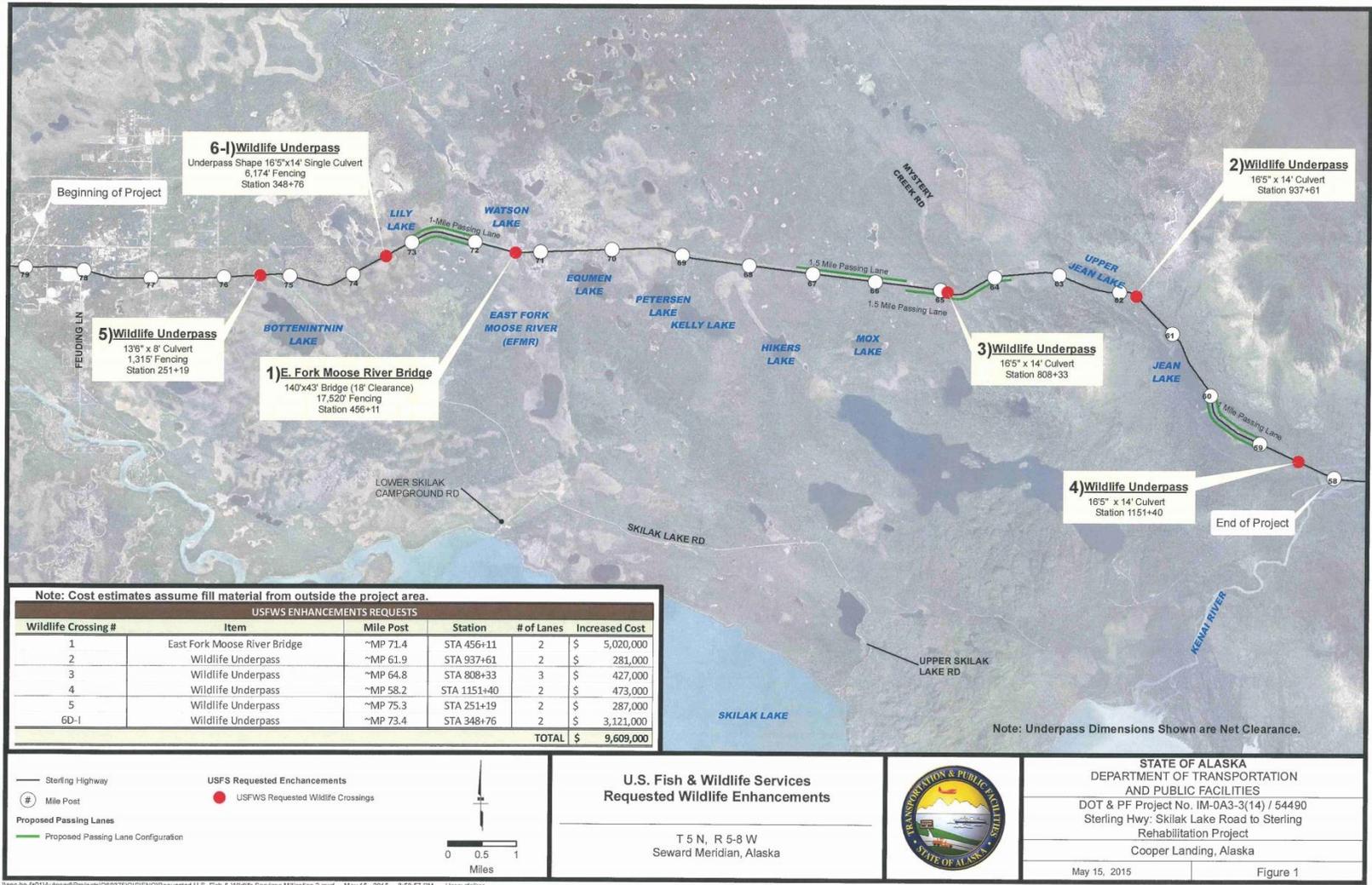


Figure 1. Location, size and cost of six wildlife underpasses proposed for the Sterling Highway MP 58-79 Project. To offset costs of installing a larger culvert at MP 73.4, the Kenai National Wildlife Refuge proposes to contribute gravel fill from an existing on-Refuge gravel material site at MP 63.4.



Figure 2. Overview of proposed activities to extract gravel from the MP 63.4 material site. The proposed activities also include reclaiming the entire material site and abandoned section of Mystery Creek Road, rerouting Mystery Creek Road and its intersection with the Sterling Highway to the east, and providing both a parking lot for public use and a helispot for administrative use.

### **3. AFFECTED ENVIRONMENT**

The overall Refuge environment that would be affected by the proposed activities is described in detail beginning on page 1-14 in the Kenai National Wildlife Refuge Comprehensive Conservation Plan (CCP) (2010), which was accompanied by an Environmental Impact Statement. This environmental assessment focuses on a very specific portion of the total area of the affected environment covered by the CCP. The descriptions that follow are summaries of the information that apply to the Mystery Creek Road entrance and material site found on the north side of the Sterling Highway between Mile 63.4 and 64.1.

Mystery Creek Road was originally constructed in 1960 by a local utility company to allow maintenance of a gas pipeline that extends from Adkins Road to its terminus in the City of Anchorage. It is approximately 10 miles long and terminates where it intersects with the pipeline maintenance trail just west of the Mystery Creek stream crossing. It is typically closed to vehicular traffic to protect the mostly unimproved road from damage and provide safe travel for pipeline maintenance workers. There is a gate at the intersection with the Sterling Highway and this gate is opened seasonally from August through October to public vehicular access. Typically visitors use the road to access the area for hunting and berry or mushroom gathering.

The existing material site (Material Site MS 21-2-399-01) is located at Mile 63.4 of the Sterling Highway, approximately 0.7 miles east of the current Mystery Creek Road intersection and gate. This site was previously used for various road construction and maintenance activities with the last use occurring in the early 1980's. There has been no restoration at the site and to date it remains largely dominated by rock and gravel with limited vegetation growth due to the lack of organic soils. In the center of the pit is a small stand of trees that has grown on what is believed to be a pile of overburden stockpiled during prior material extraction. The existing site is approximately 10-ft to 12-ft below the original grade with steep eroding and unvegetated slopes on the north and east side of the site. The site is gated and no public vehicular access is granted. There is an old horse trail that departs from the northeast corner of the pit that is occasionally accessed by a few individuals. In winter when conditions are favorable and the Refuge is open to snow machine access, visitors will occasionally park at the gate to offload their machines and then travel to Mystery Creek road via a power line on the north side of the Sterling Highway. In addition, the Refuge occasionally uses the site as a temporary helicopter landing area for staging and refueling.

### 3.1 THE PHYSICAL ENVIRONMENT

#### SOILS

Soils in the project area as determined by past excavations and test holes indicate the area has an organic mat of 6 to 12-inches. Below that is at least 30-ft of gravel with silt and intermixed layers of sand.

#### WATER

The nearest surface water is Dog-team Lake which is 1,000 feet to the east of the existing material site. Dog-team Lake is approximately 45-ft below the elevation of the bottom of the existing material site, but an elevation profile indicates that the rim of the basin is 5-ft higher than the undisturbed ground around the existing site. Ground water was encountered at 19-ft to 20-ft in 3 of the test borings in the proposed material site expansion area.

### 3.2 THE BIOLOGICAL ENVIRONMENT

#### VEGETATION

The area consists predominantly of rolling hills at the easternmost section of the Kenai lowlands. The habitat is dominated by white and black spruce (*Picea glauca*, *P. mariana*) and paper birch (*Betula papyrifera*) with some areas being mixed and others being mostly comprised of pure spruce. Alder (*Alnus sp.*), willow (*Salix sp.*) and quaking aspen (*Populus tremuloides*) often dominate for a period of time after a disturbance of the spruce/birch vegetation type.

#### WILDLIFE

The Refuge has documented 1,921 species of flora and fauna: 154 birds, 20 fish, 35 mammals, 628 arthropods, 495 vascular plants, 31 fungi, 328 lichens, and 7 mollusks. No threatened or endangered species are known to occur in the overall Sterling Highway MP 58-79 project area.

#### FISH

No fish habitat or fishery resources are present within the area affected by the proposed activities (Mile 63.4 material site, Mystery Creek Road rerouting and relocation of intersection with Sterling Highway).

### 3.3 THE SOCIAL ENVIRONMENT

#### CULTURAL RESOURCES

There are no known archeological or historical resources on Refuge lands affected by the proposed activities.

## EDUCATIONAL/RECREATIONAL OPPORTUNITIES

The importance of providing educational and recreational opportunities in the Refuge was recognized by the Alaska National Interest Lands Conservation Act (ANILCA). Refuge purposes under ANILCA include providing opportunities for environmental education, interpretation, and fish and wildlife-oriented recreation. Currently, there is a bulletin board at the entrance of Mystery Creek Road providing an opportunity to share information with the public, accessible from August through October when the gated road is open to vehicular traffic. Lack of safe parking when the road is closed limits opportunities to provide educational and walk-in recreation during periods when the road is closed.

## PUBLIC ACCESS

Access to Mystery Creek Road is seasonal from August through most of October. During open periods typical users access Mystery Creek Road for hunting (both sport and subsistence) as well as berry or mushroom gathering. During winter months the area is utilized by snow machines (when authorized by the Refuge Manager) and dogsleds for trapping or general recreation.

## VISUAL RESOURCES

The visual quality of scenery in the proposed project area is impaired to a certain degree by the highway itself, two parallel transmission lines and the material site at Mile 63.4. Mystery Creek Road is a very primitive road at the base of the Kenai Mountains which tower behind it to the east.

## SOCIO-ECONOMIC CONDITIONS

The overall economy of the Kenai Peninsula is diverse and healthy, and tourism is an important part of the economy. Recreational opportunities associated with Mystery Creek Road include hunting, trapping, guided horseback trips, wildlife watching and photography. Limited available parking during periods when the road is closed restricts opportunities to utilize this area by foot.

## **4. ENVIRONMENTAL CONSEQUENCES**

The purpose of this section is to identify and describe potential environmental effects on the biological and social environments that could result from the implementation of either of the two alternatives. The environmental consequences for this project generally relate to public use and public safety.

Considerations	Alternative A	Alternative B
Public Safety at Highway	--	+
Support Wildlife Crossing Mitigation	-	+
Short-term Development Footprint	0	-
Long-term Development Footprint	-	+
Opportunities for Public Access	-	+
Short-term Wildlife Habitat Availability	0	-
Long-term Wildlife Habitat Availability	-	+
Opportunities for Education and Outreach	0	+

#### 4.1 **ALTERNATIVE A: NO ACTION ALTERNATIVE**

##### 4.1.1 **EFFECTS ON PHYSICAL ENVIRONMENT**

###### AIR QUALITY, SOILS, WATER

Under the No Action Alternative, no impacts to air quality would occur. The existing 16.9-acre Mile 63.4 material site would likely remain largely non-vegetated without topsoil or organics being brought in to aid in the re-establishment of native plant species. There would be no impact to other soils, water quality or quantity in the project area.

##### 4.1.2 **EFFECTS ON THE BIOLOGICAL ENVIRONMENT**

###### VEGETATION, WILDLIFE, FISH

Under the No Action Alternative, the existing 16.9-acre Mile 63.4 material site would remain as non-vegetated rock and gravel for the foreseeable future. Currently this habitat supports very little wildlife with the exception of a few species of arthropods which thrive in gravel. No bird species are known to nest in the material site and no wildlife species utilize the area other than when passing through to access other areas.

Installing a smaller undercrossing at Mile 74.3 would likely reduce use of the undercrossing by wildlife, particularly moose and caribou, and limit the effectiveness of this structure in reducing habitat fragmentation effects of the expanded highway. In addition, a less effective undercrossing structure would likely increase potential for moose-vehicle collisions at this location, negatively impacting public safety.

No impacts to listed species would occur under the No Action Alternative, as no Threatened or Endangered species are found in the area.

No impacts to fish or fish habitats would occur under the No Action Alternative as no fishery resources are present in the area.

### 4.1.3 EFFECTS ON THE SOCIAL ENVIRONMENT

#### CULTURAL RESOURCES

No impacts to cultural resources would occur under the No Action Alternative.

#### EDUCATIONAL AND RECREATIONAL OPPORTUNITIES, PUBLIC ACCESS

Under the No Action Alternative, the existing entrance to Mystery Creek Road would remain in its current location. Traffic safety would be negatively impacted following construction of an eastbound passing lane under the Sterling Highway MP 58-79 Project. Public parking would remain limited during periods when Mystery Creek Road is closed to vehicular traffic, restricting recreational use of the area and opportunities to provide interpretive and educational information at the site.

#### VISUAL RESOURCES

The scenic quality of the area will not change under the No Action Alternative.

#### SOCIO-ECONOMIC CONDITIONS

Recreational and educational opportunities would not change and levels of public use of the area would remain similar to current and continue to make relatively minor contributions to local and regional economies.

## **4.2 ALTERNATIVE B: PREFERRED ALTERNATIVE**

### 4.2.1 EFFECTS ON THE PHYSICAL ENVIRONMENT

#### AIR QUALITY, SOILS, WATER

During the expansion of the material site, staging and utilization of the existing material site for project activities, and to a lesser degree, during reclamation efforts, temporary impacts to air quality may occur due to fugitive dust. Over the longer term, localized air quality may be improved once vegetation is reestablished in the existing material site.

Under Alternative B, approximately 150,000 cubic yards of gravel will be removed from the Mile 63.4 material site, including from approximately 5.5 acres of adjacent undeveloped habitat. Organic soils from the site expansion area will be disturbed, but stockpiled on site for redistribution during the reclamation process. Additional organic material from the highway corridor displaced during construction of the Sterling Highway MP 58-79 Project will also be stockpiled and later spread over the entire material site. The 16.9 acres of the material site

disturbed by previous gravel extraction and virtually devoid of organic soil, as well as the previously undisturbed expansion area, would be covered with organic material and seeded with native grasses.

Minor impacts to water quality from accidental fluid releases from equipment and/or the asphalt plant could occur under this Alternative. Implementation of best management practices through requirements of the APDES permit and the Refuge-issued Permit would serve to avoid or minimize these effects.

#### 4.2.2 EFFECTS ON THE BIOLOGICAL ENVIRONMENT

##### VEGETATION, WILDLIFE, FISH

Under Alternative B, expansion of the existing material site would result in 5.5 acres of undisturbed forest habitat being temporarily converted to a grass-dominated habitat following reclamation. Re-seeding with native grasses will restore vegetation on 13 acres (the parking area and helipad would comprise 3.9 acres) of the existing material site currently almost devoid of vegetation. Reclamation activities would facilitate longer term restoration of forest habitat on the material site. Rerouting of the entrance to Mystery Creek Road under this Alternative would result in minimal loss of forest habitat because the roadbed will be constructed along a previously disturbed bulldozed fire suppression trail.

Installation of the larger undercrossing at Mile 74.3 under this Alternative is expected to effectively facilitate use of the structure by moose and caribou, thus reducing the habitat fragmentation impacts of the expanded highway footprint. Installation of this structure would also decrease the potential for wildlife-vehicle collisions.

Loss of habitat and general disturbance from project activities would temporarily displace migratory birds and other wildlife currently utilizing the general project area. Clearing of vegetation would occur outside of the migratory bird nesting season, thus avoiding impacts to nesting birds. Reclamation efforts which reestablish native grasses in the material site will benefit some wildlife species. Long-term restoration may not fully recover the quality and productivity of the 5.5 acres of forest habitat lost due to the site expansion; however, the gain of approximately 13 acres of restored forest habitat in the existing disturbed area of the material site should provide a net habitat benefit and increase wildlife utilization in the area.

No impacts to listed species would occur under Alternative B, as no Threatened or Endangered species are found in the area.

No impacts to fish or fish habitats would occur under the No Action Alternative as no fishery resources are present in the area.

### 4.2.3 EFFECTS ON THE SOCIAL ENVIRONMENT

#### CULTURAL RESOURCES

Since there are no known cultural resources in the area to be affected by the proposed activities in the Mystery Creek Road and Mile 63.4 material site area, no impacts to cultural resources under the Preferred Alternative are anticipated.

#### EDUCATIONAL AND RECREATIONAL OPPORTUNITIES, PUBLIC ACCESS

Relocating the Mystery Creek Road entrance and creating a safe parking area will enhance public access and subsequently increase educational and recreational opportunities from November through July (when the entrance gate is closed). The newly constructed parking area will allow educational field trips to utilize the area as well as the potential for interpretive displays detailing the restoration process and other information about the area.

#### VISUAL RESOURCES

Site reclamation would improve the overall scenic qualities in the area. Project activities will retain the 150-ft vegetative buffer between the existing material site and the Sterling Highway.

#### SOCIO-ECONOMIC CONDITIONS

Expanded opportunities for education and recreation under this Alternative would result in some increased use of the area by the public and minor positive benefits to local and regional economies.

## **5. CONCLUSIONS OF THE DRAFT ENVIRONMENTAL ASSESSMENT**

The project activities being evaluated in this Environmental Assessment include the use and expansion of an existing material site at Mile 63.4 for extraction of approximately 150,000 cubic yards of gravel to be used on the Sterling Highway MP 58-79 Project. Contribution of gravel materials would support installation of a wildlife undercrossing designed to facilitate movement by caribou and moose by offsetting costs not covered by the project budget. Upon completion, reclamation activities would restore vegetation in the material site and facilitate long-term restoration of forest habitat. In addition, a portion of the Mystery Creek Road would be re-routed and its intersection with the Sterling Highway relocated to Mile 63.4 to improve traffic safety. A small parking area (Figure 2) would be constructed to provide safer public access to Mystery Creek Road. The Mystery Creek road-bed from the Sterling Highway intersection to the point where the new road connects to Mystery Creek Road would be removed and

reclaimed. During project construction, the existing material site at MP 63.4 would be used for equipment staging and an asphalt plant.

This Environmental Assessment is intended to assist the Service in determining if proposed project activities would result in significant impacts to the environment. This analysis indicates that while the Preferred Alternative would result in minor, short-term negative impacts to biological resources, no anticipated long-term and/or significant detrimental impacts to Refuge resources would occur. Further, installation of a larger wildlife undercrossing at the Mile 73.4 location and restoring habitats in existing, disturbed areas of the Mile 63.4 material site would improve biological productivity and benefit Refuge wildlife in the long term. Lastly, relocating the entrance to Mystery Creek Road and reducing wildlife-vehicle collisions would enhance traffic safety.

## **6. CONSULTATION AND COORDINATION WITH OTHERS**

### **6.1 Federal Highway Administration and Alaska Department of Transportation**

Under Section 4(f) of the US Department of Transportation Act of 1966, special effort must be made to protect significant publicly owned parks, recreation areas, and wildlife and waterfowl refuges, as well as historic sites of national, state or local significance from conversion to transportation uses. The Act requires that potential permanent and temporary impacts to protected resources go through an extensive review and approval process prior to finalizing the project design. As the proposed project would involve temporary occupancy and a permanent use of the Refuge, consultation on Section 4(f) requirements between the Refuge, the Alaska DOT&PF and the Federal Highway Administration is required and is ongoing.

### **6.2 Endangered Species**

No known federally-listed Threatened or Endangered species occur on the Refuge. The Service has therefore determined that the proposed activities involving gravel extraction and site reclamation, realignment of the Mystery Creek Road and temporary occupancy of MP 63.4 material site will have “no effect” on species listed under the Endangered Species Act or designated critical habitat.

### **6.3 National Historic Preservation Act**

In accordance with the *2014 Programmatic Agreement...for the Federal-Aid Highway Program in Alaska*, a cultural resources literature review was initially conducted, followed by a field survey investigation in July 2015 by DOT&PF’s consultant (DOWL) for the Sterling Highway MP 58 – 79 Project. The "study area" is located predominantly within DOT&PF's 300-ft wide ROW, encompassing 780 acres. Potential material sites were evaluated at Mile 63.4, Mile 69.3, Mile

70.8, and Mile 73, which entailed surveying an additional 106.95 acres. Potential access road re-alignments at Watson Lake Campground, Mystery Creek Rd., and the Jean Lake Campsite were also evaluated for cultural resources, comprising another 11.44 acres. All of the material site access road re-alignments are located within the Refuge.

While two previously recorded sites were located and verified within the study area, no new cultural resources were identified as a result of the pedestrian and subsurface surveys. Based on the results of the investigation, DOT&PF found that no historic properties would be affected by the project, pursuant to the implementing regulations of Section 106 of the National Historic Preservation Act.

A Cultural Resources Investigation Report was subsequently submitted to the State Historical Preservation Office (SHPO) on March 1, 2016, providing documentation in support of DOT&PF's finding of no historic properties to be affected. On March 4, 2016, SHPO issued their concurrence with this finding.

#### 6.4 Alaska National Interest Lands Conservation Act- Subsistence

Section 810 of the Alaska National Interest Lands Conservation Act of 1980 requires that, before permitting occupancy or use of public lands, a federal agency must evaluate the effects of that occupancy or use on subsistence uses or needs. Neither Alternative considered in this Environmental Assessment would negatively impact subsistence users or the fish and wildlife populations upon which they depend.

## **7. LIST OF PREPARERS**

This document was prepared and reviewed by U.S. Fish and Wildlife Service staff including:

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