

DRAFT
REVISED FINDING OF NO SIGNIFICANT IMPACT (FONSI)
AND FINDING OF NO PRACTICABLE ALTERNATIVE (FONPA)

ADMINISTRATIVE UPDATE TO THE 2005
ENVIRONMENTAL ASSESSMENT

OLIKTOK LONG RANGE RADAR STATION (LRRS)
ROAD PROJECT OLIKTOK, ALASKA

The United States Air Force (USAF), 611th Air Support Group, prepared an Environmental Assessment (EA) for construction of a new access road to the Oliktok Long Range Radar Site (LRRS) in northern Alaska. The USAF identified a Preferred Alternative (PA) and signed a Finding of No Significant Impact (FONSI) and Finding of No Practicable Alternative (FONPA) in April 2005. Since the signed FONSI/FONPA, a privately owned parking area was constructed at the location where the USAF PA connected to the existing road. The 2005 PA has since been revised to intersect with the existing road just east of Drill Pad 3Q and west of the 2005 EA intersection location and includes the addition of an overhead powerline. The Administrative Update to the EA, incorporated by reference into this finding, presents the analysis of potential environmental consequences of activities associated with the revised PA, and provides environmental protection measures to avoid or reduce adverse environmental impacts.

The Oliktok LRRS is located at Oliktok Point on the Beaufort Sea, approximately 35 miles from the communities of Prudhoe Bay and Nuiqsut. The LRRS currently serves peacetime air surveillance as part of the North American Air Defense Command and is adjacent to private oil exploration and production infrastructure. The existing access road and underground utilities to the Oliktok LRRS follows the coast from Oliktok Point to the LRRS facility and is subject to seasonal damage from storm and wave action from the Beaufort Sea. Extensive reconstruction efforts have been made annually to repair both the road and the underground lines to maintain consistent access and power to the LRRS.

The current PA has been redesigned from the 2005 PA at its southern end to avoid the parking area and will construct an approximately one-mile-long road from an inland portion of the existing road system to the Oliktok LRRS, providing year-round, unimpeded access to the facility. Additionally, the installation of an overhead powerline will be constructed to replace the existing one buried underground beneath the old road. Two other build alternatives were considered during the 2005 EA effort, both of which had slightly different routes for the new road and its intersection with the existing road system. The proposed action satisfies both the project need as well as the desired security associated with surrounding oil exploration and production facilities. The No Action alternative would result in a negative impact to the environment, as future storm and wave action against road stabilization efforts would result in continued material transport into the salt marsh lagoon.

The current PA is located within an extensive wetland area. Upland areas are not present within the project vicinity. As such, the PA would fill approximately seven acres of wetlands, however, there will be no significant environmental impacts from the PA due to the implementation of mitigation measures. The project area is within brood and rearing range of the spectacled eider (*Somateria fischeri*) and Steller's eider (*Polysticta stelleri*), both of which are listed as threatened species. To minimize impacts to the two eider species as well as to the ground surface, construction will take place during the winter. Air quality impacts will only occur during construction and will be brief in duration. Although cultural resources are present in the project vicinity, no resources will be disturbed or impacted as a result of the proposed action. Culverts will be installed in the road prism to aid in flood and drainage patterns present in the project area.

Finding of No Significant Impact:

Based on the Administrative Update to the 2005 EA, incorporated by reference into this finding, I conclude that the PA, construction of a new road connecting the Oliktok LRRS facility to the existing road system and installation of overhead powerlines, would have no significant individual or cumulative impact upon the environment. An Environmental Impact Statement is not warranted for this project and will not be prepared.

Finding of No Practicable Alternative:

EO 11990 requires Federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct and indirect support of new construction in wetlands wherever there is a practicable alternative. If it is found that there is no practicable alternative, the agency must minimize the destruction, loss, or degradation of wetlands and circulate a notice explaining why the action is to be located in a wetland prior to taking action. In accordance with EO 11990, a FONPA must accompany the FONSI stating why there are no practicable alternatives to development within or affecting wetlands.

The project is located within an extensive wetland area with no upland areas present within the vicinity, as such, there are no practicable alternatives to siting the project in an area containing wetlands subject to the requirements of EO 11990. Prior to project implementation, USAF would obtain a U.S. Army Corp of Engineers (USACE) permit in accordance with Section 404 of the Clean Water Act (CWA) to ensure the project meets all applicable terms and conditions. Pursuant to EO 11990 and information presented in the Administrative Update to the 2005 EA, there is no practicable alternative to the PA, and the Proposed Action includes all practicable measures to minimize harm to the environment. This finding fulfills the requirements of the referenced EO and 32 CFR 989 for a FONPA.

Signature to be provided with final version
SIGNATORY NAME
RANK
TITLE

DATE

Draft Administrative Update to the 2005 Oliktok Road Environmental Assessment

1. Background:

The USAF issued a FONSI/FONPA for an EA prepared in April 2005 regarding the construction of a new access road to the Oliktok LRRS in northern Alaska. The Oliktok LRRS is located at Oliktok Point on the Beaufort Sea, approximately 35-miles from the communities of Prudhoe Bay and Nuiqsut. The LRRS serves peacetime air surveillance as part of the North American Air Defense Command and is adjacent to private oil exploration and production infrastructure. The existing access road to the Oliktok LRRS follows the coast from Oliktok Point to the LRRS facility and is subject to seasonal damage from storm and wave action from the Beaufort Sea. Extensive reconstruction efforts have been made annually to repair the road to maintain consistent access to the LRRS.

Between the development and signing of the 2005 EA FONSI/FONPA and present day, a privately-owned parking area was constructed at the planned intersection of the 2005 EA PA road location, eliminating this as a feasible option. The two other build alternatives listed in the 2005 EA were not chosen as preferred options due to considerations listed in the Alternatives section below. Thus, the construction of the new road was never carried out. The 2005 PA has since been revised to intersect with the existing road east of Drill Pad 3Q and west of the 2005 EA PA intersection location (see figure 1). Both the 2005 EA PA and this Administrative Update PA would construct an approximately one-mile-long road from an inland portion of the existing road system to the Oliktok LRRS, providing year-round, unimpeded access to the facility, satisfying both the project need as well as the desired security associated with surrounding oil exploration and production facilities.

In addition to the road reroute, the installation of an overhead powerline is proposed which will intertie with the local high-voltage, overhead power network and run parallel to and east of the proposed new road (see figure 2). The current powerline runs underground alongside the existing coastal access road which is subject to erosion from storm surges and damage caused by ground freeze/thaw cycles leading to interruptions in power supply and requiring frequent repairs. The impacts associated with this addition as well as the road realignment will be mitigated by performing construction in the winter months, and by obtaining a CWA Section 404 permit for the fill of wetlands. Further analysis on project changes between the 2005 EA PA and this Administrative Update PA, alternatives, environmental impacts, mitigation measures, and coordination and permitting are outlined in the sections that follow.

2. Description of Proposed Changes to the Project:

Road Alignment

2005 PA

The 2005 EA evaluated three different road alignments. The preferred road alignment (Alternative three, blue line) was between the Oliktok LRRS airfield and the existing road east of Drill Pad 3Q, turning east from a direct route approximately 0.5-mile from the airfield (Figure 1).

Administrative Update PA

The new proposed road alignment consists of a direct southern access route from the drill pad (Figure 2).

Power Line

2005 PA

The installation of a power line was not included as part of the project description and actions analyzed in the 2005 EA.

**Administrative
Update PA**

The current project description includes the installation of an overhead powerline that will intertie with the local high-voltage, overhead power network and run parallel to and east of the new road (Figure 2, red line). The power poles will be installed in the winter on frozen tundra utilizing tracked vehicles or ice roads. The poles will be placed in the ground using set and slurry pile methods (drill hole, set pile, and fill annulus with slurry). A small portion of the power lines will be buried under the runway. Once the power poles are installed, the overhead power lines will be installed and tensioned with the use of a helicopter.

Figure 1

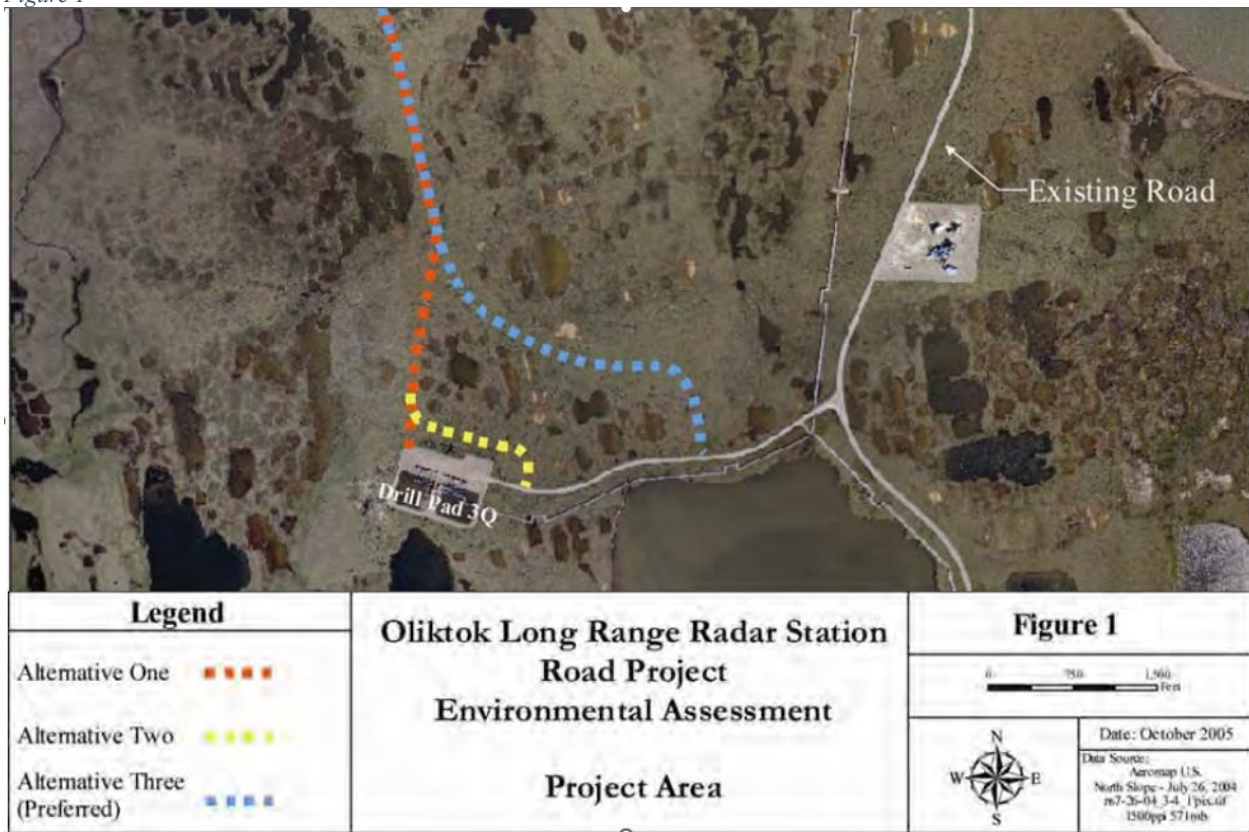
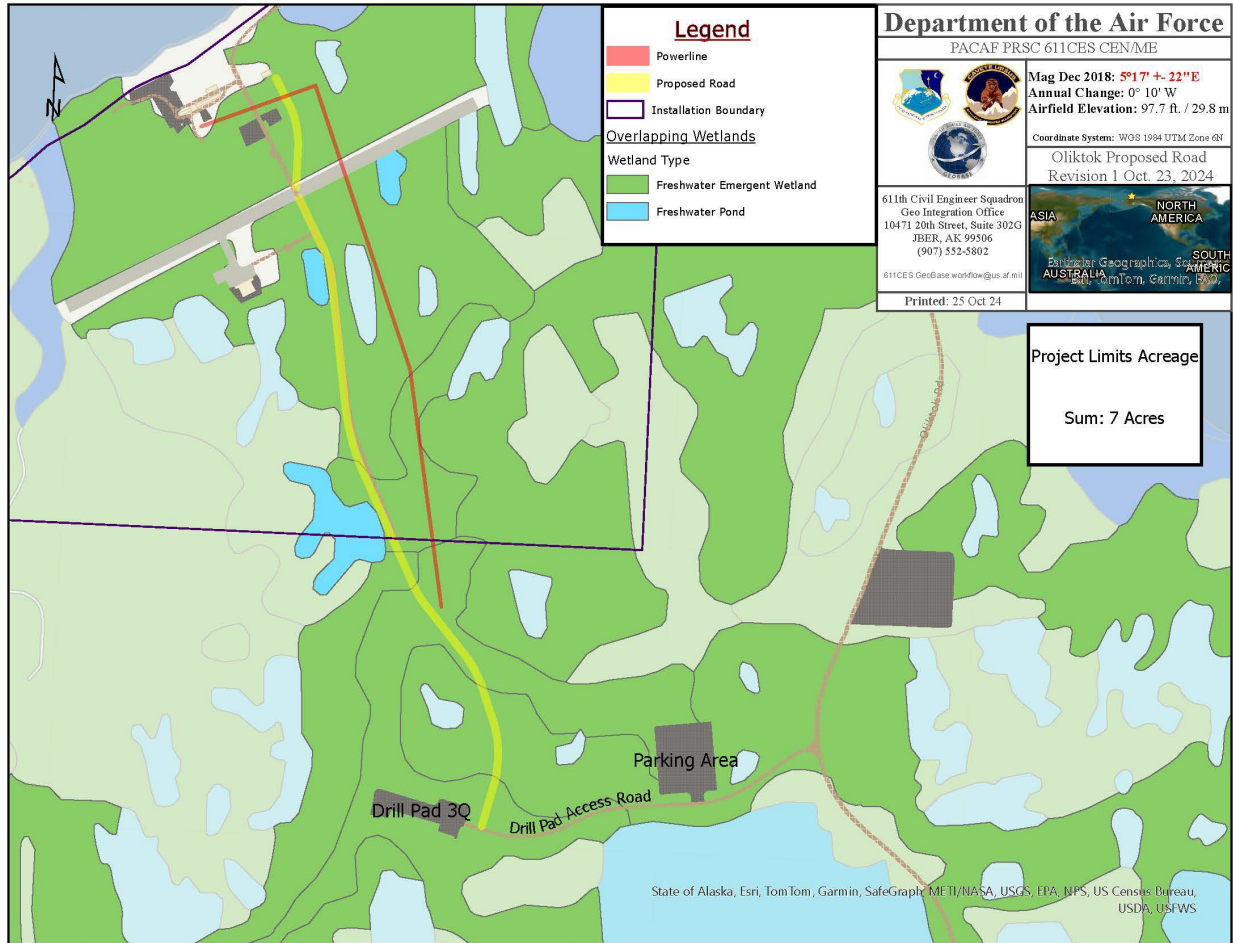


Figure 2



3. Reason for Changes to the Project:

Road Alignment

After the 2005 EA was completed, ENI, an energy company on the north slope, built a parking area where the preferred road was planned to intersect with the Drill Pad Access Road. This eliminated it from being a viable option as it would have hit the middle of the parking area, would have multiple utility conflicts, and can be accomplished with a shorter route. Because of these constraints, development of a new route for the access road is necessary.

Addition of Power Line

The current utility line at Oliktok LRRS is the sole source of power to the site and is critical for defense operations. It is buried underground alongside the existing coastal access road and is subject to significant erosion from storm surges and additional damage caused by the freeze/thaw cycles of the soil. This has led to multiple interruptions in power supply spanning from the SANTOS' Saltwater Treatment Plant (STP) east along the coast requiring frequent repairs and necessitating the use of temporary generators. A more reliable source of power is needed for this critical defense operation.

4. Alternatives Considered

Road Alignment

**Alternatives
1 & 2**
*Road Alignment 1
& 2*

Two other alternatives were considered during the 2005 EA effort (Figure 1), both of which had slightly different routes for the new road and its intersection with the existing road system. Both alternatives, however, placed the road entrances very close to, or directly through, an oil field operation site, posing safety and logistical concerns. These routes also required more drastic road contours to avoid constructing on existing ponds, causing further impacts to the environment. Moreover, the curvature of the two alternatives posed a safety risk to drivers, particularly in winter conditions as it provided drivers with less time to correct their position if they began to veer off course and increased the risk of losing traction around turns. Therefore, these alternatives were not selected.

Alternative 3
No Action

The No Action alternative would result in a negative impact to the environment, as future storm and wave action against future road stabilization efforts would result in material transport into the salt marsh lagoon.

Alternative 4
Preferred

The Preferred Alternative is to construct an approximately one-mile-long road from an inland portion of the existing road system to the Oliktok LRRS that will intersect with the existing road east of Drill Pad 3Q and west of the 2005 EA PA intersection location (see Figure 1).

Power Line

Alternative A
Underground lines

Alternative A, burying the powerlines underground, was deemed impractical as the current system is buried underground which has led to frequent and costly maintenance and repairs. The North Slope experiences extreme cold temperatures, which can cause the ground to freeze deeply and disrupt underground cables, leading to higher maintenance needs and power outages. Installing underground lines in this permafrost-rich region also poses technical difficulties and environmental risks, as trenching and burying lines can damage sensitive tundra ecosystems.

Alternative B
*Overhead Lines on
Road Corridor*

Alternative B, building the powerline directly alongside the proposed road corridor, was also considered but found to be infeasible as building a curved powerline as opposed to a straight one is generally not a good option due to logistical and technical challenges. Curved lines introduce additional stress points along the route, making the infrastructure more vulnerable to wear and potential failure, especially in areas prone to high winds or severe weather, such as the north slope.

Alternative D
No Action

The No Action Alternative would result in continued disruptions in power supply and impacts to the mission.

Alternative C
*Overhead Lines
(Preferred)*

Overhead powerlines can be installed more efficiently, require fewer repairs, and can be maintained with less impacts to wetlands in the project footprint.

5. Environmental Impacts Resulting from Project Change:

Wetlands

The proposed action would adversely affect wetlands by placing fill for the new access road. Construction would require approximately 6 acres of wetlands to be filled. Wetland avoidance was not possible due to the nature of the project location as wetlands are prevalent in the area, and upland options are not available. Measures to minimize wetland impacts include:

2005 PA

- Side slopes will be stabilized to minimize erosion and sedimentation into wetland areas.
- During design, the height of fill, grade, and steepness of fill side slopes will be selected with minimizing the fill footprint as one of the considerations.
- Grubbing and vegetation clearing will be completed in a manner that does not damage the existing ground outside cut and fill areas.
- Culverts will be designed along the access road to maintain natural drainage patterns.

Wetland mitigation included removal of a portion of the existing road, adjacent to the salt marsh. A Department of the Army Wetland Fill Permit (Section 404) application and Wetland Avoidance and Minimization Checklist will be prepared and will be submitted for construction work in wetlands, and the USAF will abide by all stipulations in the permit.

Administrative Update PA

The current PA with changes to the road alignment and addition of utility pole placement would fill an additional one acre of wetlands than previously identified in the 2005 EA for a total of approximately seven acres. Additional mitigation measures include purchasing mitigation bank credits from an approved wetland mitigation bank. There are no other deviations under wetland impacts that require further consideration.

Biological Resources

2005 PA

Plant and wildlife communities would be affected by the construction of the new access road and material site extraction. Plant and wildlife habitat within the road footprint would be permanently lost, and animals using the habitat would be permanently displaced. Animals using adjacent habitats would be disturbed during construction. Species within the limits of fill for roadbed material would be displaced and habitat at the material sites would be disturbed and permanently displaced. Impacts of access road construction would be minor, because the types of communities that would be affected are widespread throughout the area and the affected area represents only a small increment of the total habitat available. Construction would occur in the winter months to avoid impacts to nesting migratory birds.

Removing a portion of the exiting access road would likely improve biotic community viability in the area by aiding in re-establishing the salt marsh lagoon habitat and promote the development of additional habitat for bird nesting and brooding activities.

Administrative Update PA There are no anticipated deviations identified under biological resources that require further consideration. Impacts to biological resources from installation of the powerline would be comparative to those previously identified.

Land Use

2005 PA

The project area is located on land owned by the USAF and the Alaska Department of Natural Resources (ADNR) and would require USAF to obtain an easement or lease for crossing ADNR lands. Public accessibility to the preferred road route would not change compared to the existing coastal route. Public accessibility to the new road would be available to the same extent that it is available currently using the existing coastal route.

Administrative Update PA

There are no anticipated deviations identified under Land Use that require further consideration.

Social

2005 PA

The nearest community is Nuiqsut, located approximately 30 miles southwest of the LRRS. The land is used for subsistence activities such as hunting and berry picking as well as a travel corridor for those enroute to whaling sites. The new access road would benefit the Nuiqsut community by providing more reliable access to subsistence gathering and hunting areas near the facility.

Administrative Update PA

There are no deviations identified under the social impacts that require further consideration.

Climate

2005 PA

No climate impacts were identified.

Administrative Update PA

There are no deviations identified under the climate impacts that require further consideration.

Air Quality

2005 PA

No long-term effects on air quality were identified. Short-term, construction – related air quality impacts, such as dust dispersal, may be experienced in the area, but will be mitigated through approved dust abatement BMPs

Administrative Update PA

There are no deviations identified under the air quality impacts that require further consideration.

Water Quality

2005 PA

Construction included removal of vegetation and placement of fill, which could temporarily increase suspended sediment concentration in adjacent wetland areas. Sediment could impair wetland functions including providing mammal and bird habitat and water quality protection. In accordance with Section 401 of the CWA, a Certificate of Reasonable Assurance issued by the Alaska Department of Environmental Conservation (ADEC) would be required for fill placed in wetlands. In addition, a Storm Water Pollution Prevention Plan (SWPPP) will be required to be submitted to the ADEC and the EPA by the general contractor. Construction impacts due to sedimentation would be short-term. No permanent adverse effects to the water quality are anticipated. BMPs be implemented during construction to minimize erosion

due to vegetation removal and sedimentation from new fill in wetlands. Removal of the portion of the existing access road is expected to improve water quality in the salt marsh lagoon located adjacent to the existing road and would reduce the volume of sediment washed into the salt marsh lagoon and surrounding wetlands during storm surges and by wave action.

**Administrative
Update PA**

Construction of the road no longer includes removal of organic layers, decreasing the amount of erosion and sedimentation into wetlands. The road design will include structural mechanisms, such as culverts, to preserve existing flow patterns to the maximum extent practicable. There are no other deviations identified under the Water Quality impacts that require further consideration. The selected construction contractor will be obtaining a Construction General Permit (CGP) from ADEC which will include a SWPPP to mitigate impacts to wetlands from stormwater runoff. BMPs will be implemented during construction to minimize erosion due to sedimentation from new fill in wetlands.

Threatened & Endangered Species

2005 PA

The road alignment was not anticipated to significantly displace spectacled eider, which are listed as a threatened species. Coordination with the USFWS Endangered Species Program identified the presence of spectacled eider in the area and recommended the road be constructed during the winter to minimize disturbance. It is not expected the finished access road would impact spectacled eiders in the area.

**Administrative
Update PA**

There are no deviations under the threatened and endangered species impacts identified in the current design that weren't addressed in the 2005 EA.

Secondary and Cumulative

2005 PA

Construction of a new access road to link the Oliktok LRRS with the existing Prudhoe Bay Road system would provide access to state lands with currently limited road access. No near-term development of state land is currently proposed. If future development occurs along the access road, habitat alteration could include land clearing and wetlands fill. The access road would potentially open access for more infrastructure development, which could lead to further habitat and wetland loss, further displacement of sensitive animals, and loss of traditional subsistence hunting and gathering areas. However, considering the existing development in the area, it is unlikely that the area surrounding the proposed access road will be developed. The current mission of the Oliktok LRRS is peacetime air surveillance as part of North American Aerospace Defense Command. Since additional development of the facility is not forecast, it is expected that the new road construction project would not have substantial cumulative impacts on the Oliktok LRRS or surrounding area.

**Administrative
Update PA**

There are no secondary and cumulative impact deviations identified in the current design that weren't addressed in the original EA.

Cultural & Historical Resources

2005 PA

Based on the results of the literature review and the archeological survey of the project area, no historic properties would be affected by the proposed road.

Oliktok LRRS airfield, determined eligible for the National Register in 1999, would be affected by its use as a material source.

**Administrative
Update PA**

There is no disruption of unexcavated soil identified in the construction plans. The method of construction being used is to retain the integrity of the uppermost vegetative mat with the installation of insulation below the structural fill layers to minimize disruption to the permafrost. Construction is planned when the active layer is frozen. No material will be used from the existing runway and all construction fill will be trucked onsite from a locally permitted gravel sources.

6. Mitigation:

The Administrative Update PA, like the 2005 PA, is located within an extensive wetland area with no upland areas present within the project vicinity and are anticipated to be deemed Category 3 by USACE; these wetlands are usually plentiful in the watershed and often have the least biodiversity. Category 3 wetlands require a 1:1 mitigation ratio, meaning for every acre of wetlands impacted by the project, one acre must be restored, created, enhanced, or preserved to offset the loss. The Administrative Update PA would fill approximately seven acres of wetlands (Figure 3); the 2005 PA would have filled approximately six acres of wetlands. The mitigation measures identified for both the 2005 EA PA and the Administrative Update PA are outlined below:

2005 PA

Mitigation measures included removal of the existing coastal road system adjacent to the salt marsh to beach grade for the fill required in wetlands for construction of the PA.

**Administrative
Update PA**

Two mitigation measures are being evaluated for the current Administrative Update PA, either as standalone options or combined to meet CWA requirements:

- 1) Adopt the same mitigation measures outlined in the 2005 EA (Attachment 1), removal of the old road adjacent to the salt marsh and lowering it to beach grade. This option is considered a form of applicant proposed mitigation because it rehabilitates the site's natural functions and improves the ecosystem's integrity by restoring its natural hydrological connectivity. This option ensures compliance with wetland protection regulations aimed at achieving no net loss of wetlands.
- 2) Purchasing credits from an approved wetland mitigation bank. This option ensures compliance with regulatory requirements by compensating for wetland impacts by offering immediate, verified restoration benefits.

Figure 3



7. Consultations:

- USFWS** Consultations with USFWS have been initiated and are currently ongoing.
- SHPO** Consultations with SHPO have been initiated and are currently ongoing.

8. Coordination and Permitting:

Public Involvement

A scoping letter was sent to public representatives in Nuiqsut to gather public comment on the project. The Draft EA was made available for public comment for 30 days. Copies of the notice of availability, published in the Anchorage Daily News, Fairbanks Daily News-Miner, and Arctic Sounder are included in the attachments.

Government to Government Coordination

The Native Village of Nuiqsut and the Inupiat Community of the Arctic Slope were consulted regarding this project during the Administrative Update preparation process. Formal letters were sent to the Native Village of Nuiqsut, the Inupiat Community of the Arctic Slope, Kuukpik Village Corporation, and the City of Nuiqsut requesting information and comments on the proposed access road and utility line installation. Was a letter received? If so, any comments?

Agency Coordination

Agency representatives were contacted during development of this Administrative Update. The Draft EA was made available for agency comment for 30 days. All correspondence (electronic or otherwise) and telephone conversation records are included in the attached documents.

Permits

The following permits required for the completion of the proposed action are currently being pursued:

- A Section 404 CWA Permit application via Pre-Construction Notification will be submitted to the USACE, since the access road will be constructed in wetlands.
- A Water Quality CRA must be approved by ADEC for discharging fill for improvements into wetlands.
- ADEC requires a CGP.

9. Attachments:

- FONSI/FONPA
- Notice of Availability
- Public Comments Received
- 2005 EA
- Government to Government Coordination Letters
- Agency Coordination Letters
- USFWS Consultation Letter
- SHPO Consultation Letter