

ConocoPhillips Alaska, Inc.
Department of the Army Permit Application
Greater Mooses Tooth Two Development Project
North Slope, Alaska

Supplement Number 1 to Applicant Proposed Mitigation Statements

ConocoPhillips Alaska, Inc. ("CPAI") submits the following information to supplement the mitigation statement in the GMT2 permit application submitted to the U.S. Army Corps of Engineers (USACE) on December 28, 2017. The purpose of this submittal is to facilitate public notice and comment on the nature of compensatory mitigation that is being considered for CPAI's proposed GMT2 Project.

The options that appear to have merit as practicable and appropriate compensatory mitigation are:

- (1) Restoration of Wetlands Impaired by the Culvert Crossing on the Nuiqsut Fresh Water Supply Access Road and/or Impaired Drainage on the Nuiqsut Landfill Road.

CPAI's preferred mitigation option is to propose a permittee responsible restoration project in Nuiqsut. The potential restoration site that appears to hold the most promise is located in Nuiqsut, Alaska, at a culvert crossing where the community's fresh water supply access road crosses an unnamed beaded stream. The objective of this riverine restoration project would be to restore fish passage and sediment transport and alleviate annual break up discharges in the affected reach of a riverine wetland that discharges to the Nigliq channel of the Colville River, just southeast of the Village of Nuiqsut. The Nigliq Channel and Colville River are important subsistence fishing areas for Nuiqsut residents. This project would serve to enhance those habitats, improve the subsistence resource, and to facilitate Nuiqsut residents' year-round access to their fresh water source.

According to a recent Project Analysis Report (PAR) completed by the North Slope Borough (attached to this Supplement), the road sags significantly at the crossing and the current culvert battery is undersized, compounding ice damming and roadway overtopping during breakup flood events. While not part of the scope of investigation performed in the PAR, it is apparent the culvert condition has resulted in blocking resident fish passage upstream of the culvert battery. Damage to the road prism has increased the sediment load to the Nigliq Channel. Bank erosion both upstream and downstream is also evident. This riverine restoration project would restore Riverine function in a manner similar to Alternative 3a or 3b of the attached PAR.

The direct benefit from replacing the culvert battery and repairing the road prism consists of upstream and downstream habitat improvement through reducing sediment load and allowing resident fish passage as well as facilitating year-round access to the community's fresh water source. Should this project be selected as the preferred mitigation alternative, CPAI will prepare a wetlands assessment and submit a restoration plan that details the work to be done and explains the respective roles of CPAI and the North Slope Borough.

Another possible project is addressing impaired drainage in connection with the Nuiqsut Landfill Road, where failed culverts and gravel fill subsiding into the tundra has created ponding on both sides of the Road in between (west of) the junction of the Nuiqsut Spur Road (to east) and the Nuiqsut landfill (to the

west). As with the culvert restoration, this effort could result in increased gravel footprint in the immediate vicinity of the road due to the need to slightly widen the road to accommodate its height above the tundra.

CPAI is gathering information about both these sites and may, after further work and consultation with Kuukpik and the North Slope Borough, propose a restoration plan that focuses on one or both of these sites. Restoration would provide ‘functional lift’ that increases aquatic function of the wetlands, but likely would not result in full replacement of lost aquatic functions caused by the GMT2 project.”

(2) Preservation of Kuukpik Corporation Wetlands at Fish Creek or Elsewhere.

Kuukpik Corporation owns the surface estate in much of the watershed that includes the GMT2 project area. The subsurface estate in those lands is wholly or partly owned by Arctic Slope Regional Corporation, and much of it has been leased under terms that allow use of the surface as reasonably necessary for oil and gas exploration and development. CPAI may propose to preserve Kuukpik owned wetlands through an appropriate land protection instrument, removing the threat of surface disturbance for oil and gas development. Wetlands at the mouth of Fish Creek were used for compensatory mitigation for Kuukpik’s Nuiqsut Spur Road and pad, and nearby lands are being considered for GMT2 mitigation. Other Kuukpik owned wetlands not in the Fish Creek drainage, but with significant conservation value, may also be considered. The amount of land to be preserved will be determined using a method approved by the USACE. The nature of the land protection instrument is likely to be a deed restriction, following either the model used for GMT1 compensatory mitigation or the similar deed restriction for Kuukpik’s Nuiqsut Spur Road and pad. For this option to succeed, subsistence activities would likely need to be expressly allowed to continue on the lands, possibly including construction of typical subsistence support structures such as limited numbers of tent platforms and cabins. If this option moves forward with support from Kuukpik Corporation, CPAI will perform a wetlands assessment and submit a mitigation plan for approval.

(3) Preservation of Arctic Slope Regional Corporation Wetlands at Cape Halkett or Elsewhere.

As an alternative to option (2) described above, CPAI may propose to preserve wetlands owned by ASRC through a land protection instrument. The area has high conservation value, but has been subject to exploratory drilling in the past and has nearby State of Alaska lands available for oil and gas leasing, and is probably the closest private land to Caelus’ Smith Bay oil discovery. ASRC wetlands at Cape Halkett were preserved as the compensatory mitigation for GMT1, and lands in the same area are being considered for GMT2 mitigation, although other ASRC lands in other areas may also be considered. The GMT1 deed restriction would be the model for the legal instrument, and the amount of land to be preserved would be determined using a method approved by the USACE. If this option moves forward with support from ASRC, CPAI will perform a wetlands assessment and submit a mitigation plan for approval.