ALASKA DISTRICT TRIP REPORT

Project: Denali Commission Moorings Points Phase 4 – Yukon River

Description: Nulato, Alaska Trip Report

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George Kalli and Merlin Peterson traveled to Nulato and Kaltag, Alaska on 16 June via a charter flight with Security Aviation to conduct a site visit and scoping meeting related to potential installation of barge mooring points in the communities. While in Nulato we were escorted by Paul Mountain, a member of the Nulato Tribal Council. Two barge landing sites and two fuel headers were investigated during the site visit (Figure 1). A public scoping meeting was conducted at 1100 hours at the City of Nulato office. Two residents participated in the meeting.

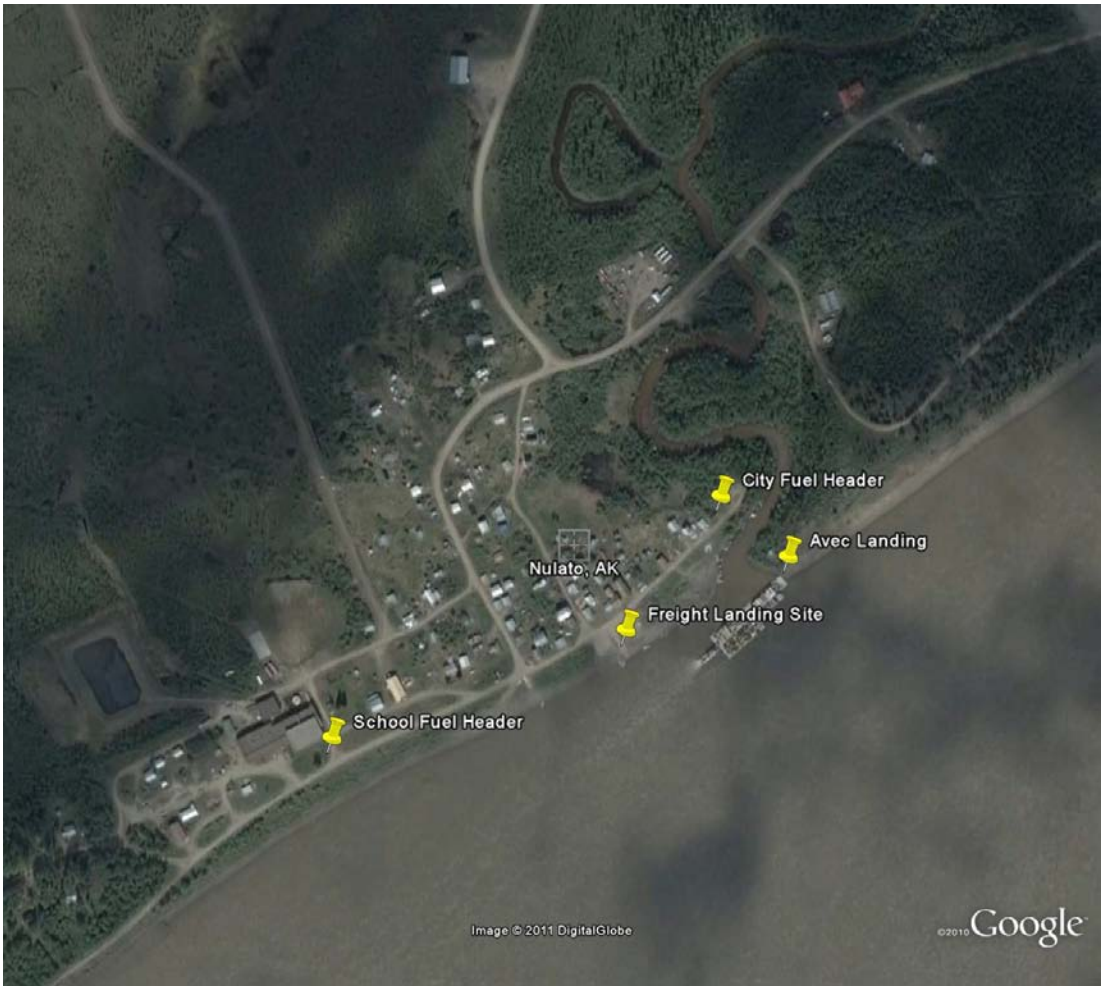

Figure 1: Overview of Nulato barge landings and fuel headers. Yukon River flows from right to left.

Following is a summary of the information learned during the public meeting and site visit.

General

Nulato consists of two parts: Old Nulato within the floodplain of the Yukon River and New Nulato located on uplands above the floodplain.

Craig Adams with the Bureau of Indian Affairs in Fairbanks was suggested as a good point of contact regarding Native allotment information in Nulato.

A gravel extraction site is at the downstream end of Nulato. The gravel is extracted from the Yukon River.

No local contractors are located in Nulato.

According to those at the meeting, no cultural or archeological impacts are expected at the freight barge landing.

There is a potential Village Safe Water project, possibly raising a wellhead, scheduled in 2012.

Freight Landing Site

We arrived at the freight landing site at 0935 hours. This landing site consists of a dirt ramp perpendicular to the river (Photo 1), with erosion protection consisting of culverts on both sides (Photos 2 and 3).

A staging area is adjacent to the landing. While on site, much material was stored in the staging area (Photo 1) because there had been a recent barge delivery. A majority of the materials seemed to be related to an airport improvements project in the village.

The beach in front of the landing area is fairly shallow with slopes in the range of 1V:5H to 1V:10H. The beach material consists of fine sand and silts on the surface. At the current water line, the beach material is eroded down 4 to 6 inches revealing gravel to 4 inches.

Imprints of Duramats were still evident in the mud from the most recent delivery (Photo 4). Duramats are temporarily placed by some barge operators to provide a more stable surface to offload equipment across.

Woody debris from a recent high water event was scattered along the bank and staging area (Photos 2 and 3).

An old deadman, consisting of a broken tie-down cable, was at the upstream end of the landing in line with the upstream end of the erosion protection and just upstream of large tractor tires stored at the landing area (Photo 5).

A small hill of partially vegetated dirt is on a portion of the downstream end of the staging area. An existing mooring point at this location could not be found during the site visit.

The proposed location of the upstream mooring point is 80 feet upstream of the center of the ramp, 5 feet upstream of the broken cable deadman, and 20 feet inland from the face of the erosion protection (Photo 6). This mooring point is recommended to be a below- grade installation to avoid conflicts with the staging area. The coordinates of this proposed mooring point are 64 43.121' N 158 06.101' W.

The proposed location of the downstream mooring point is 75 feet downstream of the center of the landing ramp adjacent to the downstream end of the small vegetated hill and 20 feet inland from the erosion protection (Photo 7). A below-grade installation is recommended for this mooring point to minimize staging area impacts. The coordinates of this proposed mooring point are 64 43.109' N 158 06.152' W.

Paul Mountain agreed that the below-grade installations would be best for this barge landing.

Photo 1: Nulato freight barge landing site and portion of staging area

Photo 2: Nulato freight barge landing looking downstream. Note culvert erosion protection

Photo 3: Nulato freight barge landing looking upstream. Note culvert erosion protection

Photo 4: Duramat imprint in freight landing site mud

Photo 5: Upstream end of landing area. Broken tie-down cable is evident to the right of tractor tires and indicated by arrow.

Photo 6: Corps employee standing at proposed location of upstream mooring point

Photo 7: Corps employee standing at proposed location of downstream mooring point. Note vegetated small hill to the right.

City Fuel Header

We arrived at the city fuel header at 1015 hours (Photo 8). We did not have previous knowledge of this particular header. Based upon the existence of fuel residue and a worn path to the header, it appeared to still be in use. Paul Mountain explained that fuel barges moor at the freight landing site and that fuel deliveries are made via a hose run from the freight landing site. The Alaska Village Electric Cooperative (AVEC) fuel landing site lies across the mouth of a creek. Many skiffs are moored in the creek adjacent to the city fuel header (Photo 9). No mooring points are recommended at this site.

Photo 8: City fuel header. Yukon River is in background.

Photo 9: Mouth of creek located between city fuel header and AVEC landing site. Note skiffs moored in mouth of creek.

AVEC Fuel Header Landing

We arrived at the AVEC fuel header at 1030 hours. Access to this site is from the cemetery located atop the bluff that is adjacent to the runway and river.

The fuel header is near the base of this steep and rocky bluff, approximately a hundred feet inland from the Yukon River (Photo 10).

There is a smokehouse between the river and the fuel header (Photo 11).

Rock is very prevalent throughout this location and could make it difficult for drilling.

The best location for a single mooring point appeared to be at the base of the bluff on the river side of a small boulder. The boulder is approximately 38 feet toward the Yukon River from the side of the smokehouse closest to the Yukon River (Photo 12). An above grade installation would be appropriate at this location.

Due to real estate concerns, it does not appear that a mooring point can be installed at this landing. The entire area at the base of the bluff appropriate for mooring point installation is a Native allotment. This information was obtained from Craig Adams at the Bureau of Indian Affairs

Photo 10: AVEC fuel header located at base of bluff to the right

Photo 11: Smokehouse near AVEC fuel header

Photo 12: Corps employee standing at potential location for AVEC fuel landing mooring point.

School Fuel Header

We arrived at the school header (Photo 13) at 1210 hours following the public meeting. We were informed by the barge companies that mooring points are not needed here. No mooring points are recommended at this site.

Photo 13: School fuel header

RECOMMENDATIONS

Installation of two below grade mooring points, as described in this report, is recommended at the freight landing.

Due to the presence of a Native allotment, no mooring points are recommended for the AVEC fuel header.

There is no need for mooring points at either the city or school fuel headers.