



U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 09-JUL-2021

ORM Number: POA-2005-02044

Associated JDs: Historic preliminary JD issued on January 5th, 2006.

Review Area Location¹: D Street and Lazelle Road, Fairbanks Alaska.

State/Territory: AK City: Fairbanks County/Parish/Borough: Fairbanks North Star Borough

Center Coordinates of Review Area: Latitude 64.8555 Longitude -147.6726

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list **MUST** be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A	N/A	N/A	N/A

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)³

(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination
N/A	N/A	N/A	N/A

Tributaries ((a)(2) waters):

(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination
N/A	N/A	N/A	N/A

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

(a)(3) Name	(a)(3) Size	(a)(3) Criteria	Rationale for (a)(3) Determination
N/A	N/A	N/A	N/A

Adjacent wetlands ((a)(4) waters):

(a)(4) Name	(a)(4) Size	(a)(4) Criteria	Rationale for (a)(4) Determination
N/A	N/A	N/A	N/A

¹ Map(s)/Figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide and included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.

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⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12))⁴:

Exclusion Name	Exclusion Size	Exclusion ⁵	Rationale for Exclusion Determination
PSS/PEM North half Tract A	4.38 acres	(b)(1) Non-adjacent wetland	The wetland is not jurisdictional because it is connected to wetlands adjacent the Chena River via a relic tributary (a slough) which is occluded by an artificial feature (an equalization culvert) that does not convey surface water flow in a typical year. The relic slough does not contribute flow in a typical year to the Chena River (via adjacent wetlands) due to artificial features (the culvert) but was jurisdictional at the time of impoundment.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- Information submitted by, or on behalf of, the applicant/consultant: *June 22, 2021 email with aerial imagery of the site; August 4th, 2008 letter with site photos of the culvert and relic slough pathway from Laurence Peterson (Travis and Peterson Environmental Consulting, Inc.). This information is not sufficient for purposes of this AJD. Rationale: The information was insufficient because it did not reflect data describing inundation during any one whole growing season, making it difficult to determine whether the relic slough in the south of the project area is ephemeral, and if the culvert leading offsite is a conduit for surface water to adjacent wetlands abutting the Chena River in a typical year.*
- Data sheets prepared by the Corps: *N/A.*
- Photographs: *Aerial imagery from Digital Globe (accsd July 19, 2021: May 13, 2020; May 23, 2020; June 17, 2020; May 3, 2021; May 14, 2021); Google Earth (September 28, 2020, May 17 2015, May 12 2016); Pictometry_2012_12in_7_Fairbanks_East.sid (Fairbanks North Star Borough 2012);.sid Wainwright2007 (2007 USAGFWA); Fairbanks_AHAP_mosaic_(1986).tif (Fairbanks North Star Borough 1986).*
- Corps Site visit(s) conducted on: *June 28, 2021 (E. Lyons & A. Tippery, USACE) and July 14, 2021 (R. Pristash City of Fairbanks & A. Tippery).*
- Previous Jurisdictional Determinations (AJD): *A preliminary JD was issued on January 05, 2006, no AJD was issued due to the timing of the JD and permit request which coincided with the Supreme Court’s split decision of Rapanos and Carabell. The interim guidance from Corps headquarters was to delay Approved JDs until EPA promulgated final 404 wetlands rules.*
- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B.*
- USDA NRCS Soil Survey: *Soil Survey of the Greater Fairbanks Area, v.16 (June 01, 2020 accsd online July 10, 2021 original publication 2004).*

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- _x_** USFWS NWI maps: *HU8_19080306_Chena River (accsd online, 2017); Fairbanks D-2, 1:63,360 NWI map (USFWS, 1992).*
- _x_** USGS topographic maps: *Fairbanks D-2, 1:63,360 (USGS 1952, minor revisions 1981)*

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	Administrative File, POA-2005-02044.
State/Local/Tribal Sources	Hillshade_2010_LiDAR_DEM.img (2010 Fairbanks North Star Borough)
Other Sources	Stutzmann Hydrology Report: Lazelle Estates Subdivision Surface drainage (February 2, 2006)

B. Typical year assessment(s): A typical year analysis was performed for spring break-up seasons (May) of recent years with imagery accurate enough to see presence of surface water on site. The years were 2015, 2016, 2020 and 2021. This time-period was chosen because the melt-out period of persistent snowpack on this site is the most likely time in which a surface connection with off-site jurisdictional wetlands would be possible in the normal growing season.

Aerial imagery from May 17, 2015 was used to detect surface water on the project site. A period of May 01 to May 17 was chosen to better account for potential inundation missed in the single snapshot imagery at mid-May. The antecedent precipitation tool (APT) was used to calculate normal precipitation during this period. There was no visible inundation on either side of the equalization culvert on site (i.e., no ponding or flow which would contribute to jurisdictional waters offsite). The results of the APT test were that the daily precipitation totals were mostly below the 30-year rolling average for May (with one large event just before the 17th), the one month rolling total precipitation for May was wetter than normal due to significant precipitation events in early April. Even with a wetter than normal break up season, no surface water was flowing offsite at the project location.

Aerial imagery from May 12, 2016 was used to detect surface water on the project site. A period of May 01 to May 12 was chosen to better account for potential inundation missed in the single snapshot imagery and the antecedent precipitation tool was used to calculate normal precipitation during this period. There was no visible inundation on either side of the equalization culvert on site (i.e., no ponding or flow which would contribute to jurisdictional waters offsite). The results of the APT test were that the daily precipitation totals were below the 30-year rolling average, but the period was deemed wetter than normal due to significant precipitation events in late March and April. Even with a wetter than normal break up season, no surface water was flowing offsite at the project location.

Two available images from May 13 to May 23, 2020 captured on the ground hydrology conditions. While May 2020 precipitation fell below the rolling 30-year average according to the APT, large snow events in the preceding 30 days created a wetter than normal rolling total which skewed the analysis

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toward an outcome that May was wetter than normal as compared with a 30-year rolling average. Accordingly, surface water connections seen in aerial imagery during this time period can be interpreted as wetter than normal conditions. At this time, water was present on both inlet and outlet sides of the equalization culvert which is evidence that it may have been flowing (not pooled) from west to east. Surface water also shows its pathway connecting with a larger, jurisdictional wetland north of River Road on Fort Wainwright (although the culvert below Canol Rd was not investigated).

Further analysis of aerial imagery in 2021 showed a similar surface connection (present on May 3 imagery, absent by May 14), also based on large precipitation events in and prior to mid-May which significantly increased the rolling total precipitation at the site. Using the APT, it was determined that this connection also occurred in a wetter than typical year. At the height of spring break up, surface water can move to equalization across the culvert and potentially contributes to offsite jurisdictional wetlands adjacent to a TNW.

From these four APT analyses it is established that water may flow from this wetland to contribute to an (a)(1) water in a wetter than average break-up period, but it does not do so for every wetter than average year. Logically, this shows that in a typical year it is very unlikely that surface water would flow offsite via the equalization culvert and contribute to an offsite jurisdictional area. Even in wetter than normal years the surface connection is sometimes not sufficient for this wetland to contribute to downstream jurisdictional waters.

- C. Additional comments to support AJD:** Historic documents support the fact that the equalization culvert in the south part of the project site (on the boundary with Fort Wainwright property) does provide a surface connection from on-site wetlands during break-up to wetlands at least on the west side of Canol Road. This connection is via a man-made, non-jurisdictional culvert and appears to be ephemeral in nature (i.e., providing equalization of surface water during wetter than average years and periods of flooding or heavy rain events). This is due to the fact the culvert is somewhat perched above the lowest elevation of the relic swale on both the inlet and outlet side. Typical year surface flow from break-up events mostly infiltrates in place. Culvert connectivity across Canol Road was not investigated at this time, but if surface waters from the site were to pass through culverts crossing Canol Road they would be linked via surface connection to a jurisdictional wetland mosaic that abuts the Chena River, a traditional navigable waterbody.

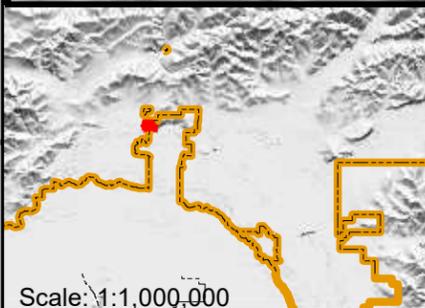
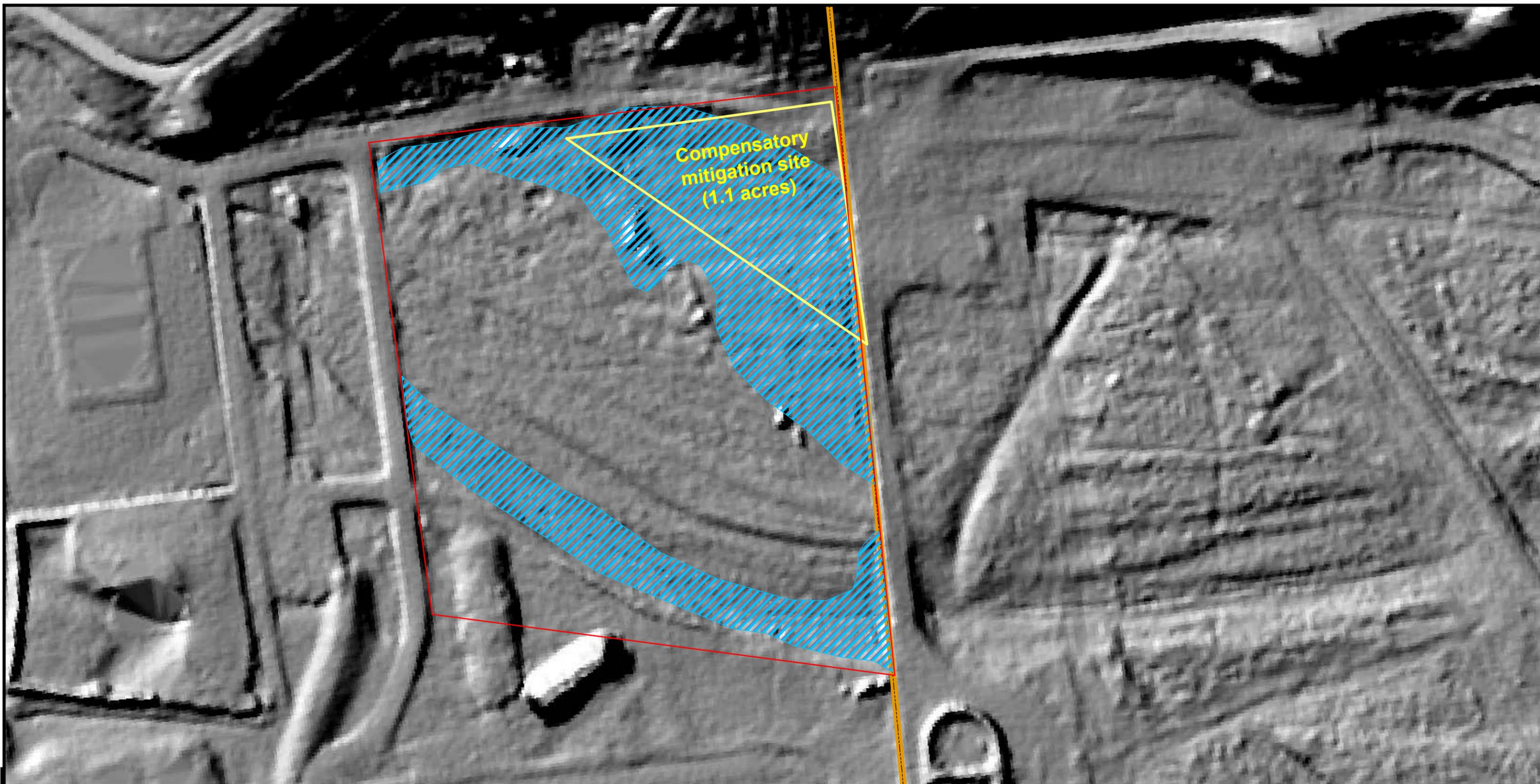
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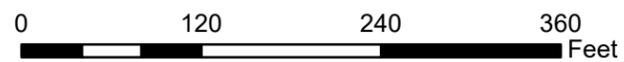
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USACE Regulatory, Alaska District
Fairbanks Field Office (907) 474-2166
Contact: amy.c.tippary@usace.army.mil
Date: 7/14/2021
Citation: USACE desktop determination, 2021
Projection: Alaska Albers Scale 1:1,470
Imagery: Hillshade_2010_LiDAR_DEM.img



Legend

-  USACE.2021.delineation of non-jurisdictional wetlands
-  Installation Boundary
-  Compensatory Mitigation Site
-  Project Area