APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 29, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2021-00454

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Alaska Borough: Municipality of Anchorage City: Anchorage
Center coordinates of site (lat/long in degree decimal format): Lat. 61.048128 ° N., Long. -149.771939 °W.
Universal Transverse Mercator: X - 350335.271771, Y - 6771316.896506
Name of nearest waterbody: Potter Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Turnagain Arm
Name of watershed or Hydrologic Unit Code (HUC): HUC 12 190204010702 Furrow Creek-Frontal Turnagain Arm

☒Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒Office (Desk) Determination. Date: 01/28/2022
☒Field Determination. Date(s): 09/27/2021

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
There are no *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

- ☐ Waters subject to the ebb and flow of the tide.
- ☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
There are and are not *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. *[Required]*

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):[1]

☐TNWs, including territorial seas
☐Wetlands adjacent to TNWs
☒Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
☐Non-RPWs that flow directly or indirectly into TNWs
☐Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☒Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐Impoundments of jurisdictional waters
☐Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.

[2] For purposes of this form an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months.

Non-wetland waters: 527 linear feet: 1 width (ft)
Wetlands: 0.036 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual and the 2007 Alaska Regional Supplement

Elevation of established OHWM (if known): N/A

2. Non-regulated waters/wetlands (check if applicable):[3]

☒Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: Wetland A (0.044 acre) and Wetland B (0.033 acre) were determined to be isolated wetlands. Wetlands A and B lack links to interstate commerce sufficient to serve as a basis for jurisdiction (Review area labeled in POA-2021-00454 AJD Figures 1 of 5 through 5 of 5, February 2022)

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: TEXT

Summarize rationale supporting determination: TEXT

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": TEXT

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

[3] Supporting documentation is presented in Section III F.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

(i) General Area Conditions:

Watershed size: (HUC 12: 190204010702) 276.93814497 square kilometers
Drainage area: 0.1 square mile

Average annual rainfall: 14.9 inches
Average annual snowfall:70.2 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐Tributary flows directly into TNW.
☒Tributary flows through 2 or more tributaries before entering TNW.

Project waters are 0.76 river miles from TNW.
Project waters are 0.01 river miles from RPW.
Project waters are 0.57 aerial (straight) miles from TNW.
Project waters are 0.01 aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: NA

Identify flow route to TNW[5]: Tributary 2 (RPW) flows to Tributary 1 (RPW), which flows to Potter Creek (RPW), which empties into Turnagain Arm (TNW)
Tributary stream order, if known: 1

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐Artificial (man-made). Explain: TEXT
☐Manipulated (man-altered). Explain: TEXT

Tributary properties with respect to top of bank (estimate):
Average width: 1 feet
Average depth: 0.5 feet
Average side slopes: Choose an item.

Primary tributary substrate composition (check all that apply):

☒Silts	☐Sands	☐Concrete
☐Cobbles	☐Gravel	☐Muck
☐Bedrock	☐Vegetation. Type/% cover: TEXT	
☐Other. Explain: TEXT		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: TEXT
Presence of run/riffle/pool complexes. Explain: No
Tributary geometry: Meandering
Tributary gradient (approximate average slope): 15%

(c) Flow:

Tributary provides for: Intermittent, but not seasonal Flow
Estimate average number of flow events in review area/year: 20 (or greater)
Describe flow regime: Water was present at time of site visit. According to Antecedent Precipitation Tool (APT), the site conditions were "Wetter than Normal" at the time of the Corps site visit.
Other information on duration and volume: TEXT
Surface flow is: Confined Characteristics: Surface flow was confined in the tributary
Subsurface flow: Yes Explain findings: Subsurface flow was observed in a sample point dug between Wetland C and Tributary 2 showing a hydrologic connection between the two.
☐Dye (or other) test performed: TEXT

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary has (check all that apply):

☒Bed and banks

☒OHWM[6] (check all indicators that apply):

☒clear, natural line impressed on the bank	☐the presence of litter and debris
☐changes in the character of soil	☐destruction of terrestrial vegetation
☐shelving	☐the presence of wrack line
☒vegetation matted down, bent, or absent	☒sediment sorting
☒leaf litter disturbed or washed away	☐scour
☐sediment deposition	☐multiple observed or predicted flow events
☒water staining	☐abrupt change in plant community TEXT
☐other (list):	

☐Discontinuous OHWM.[7] Explain: TEXT

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐High Tide Line indicated by:	☐Mean High Water Mark indicated by:
☐oil or scum line along shore objects	☐survey to available datum;
☐fine shell or debris deposits (foreshore)	☐physical markings;
☐physical markings/characteristics	☒vegetation lines/changes in vegetation types.
☐tidal gauges	
☐other (list): TEXT	

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: water color is clear

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☐Riparian corridor. Characteristics (type, average width): TEXT

☐Wetland fringe. Characteristics: TEXT

☐Habitat for:

☐Federally Listed species. Explain findings: TEXT

☐Fish/spawn areas. Explain findings: TEXT

☐Other environmentally-sensitive species. Explain findings: TEXT

☐Aquatic/wildlife diversity. Explain findings: TEXT

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: 0.036 acres

Wetland type. Explain: Palustrine

Wetland quality. Explain: TEXT

Project wetlands cross or serve as state boundaries. Explain: No, project wetlands do not cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: Choose an item. Explain: Subsurface Flow

Surface flow is: Discrete

[6] A natural or man-made discontinuity in the OHWM does not necessarily server jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7] Ibid.

Characteristics: Surface flow was not observed between Wetland C and Tributary 2, only a subsurface flow was observed.

Subsurface flow: Yes Explain findings: A sample point hole was dug between Wetland C and Tributary 2. A subsurface flow of water was observed in the hole. This is evidence of the lateral movement of water between Wetland C and Tributary 2.

☐Dye (or other) test performed: TEXT

(c) Wetland Adjacency Determination with Non-TNW:

☐Directly abutting

☒Not directly abutting

☒Discrete wetland hydrologic connection. Explain: Corps personnel dug a hole for a sample point between Wetland C and Tributary 2. A subsurface flow of water was observed in the hole. This is evidence of the lateral movement of water between Wetland C and Tributary 2.

☐Ecological connection. Explain: TEXT

☐Separated by berm/barrier. Explain: TEXT

(d) Proximity (Relationship) to TNW

Project wetlands are 0.76 river miles from TNW.

Project waters are 0.63 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Water

Estimate approximate location of wetland as within the 500-year or greater floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: water color is clear

Identify specific pollutants, if known: TEXT

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐Riparian buffer. Characteristics (type, average width): TEXT

☒Vegetation type/percent cover. Explain: Alnus sp./20, C. canadensis/50

☐Habitat for:

☐Federally Listed species. Explain findings: TEXT

☐Fish/spawn areas. Explain findings: TEXT

☐Other environmentally-sensitive species. Explain findings: TEXT

☐Aquatic/wildlife diversity. Explain findings: TEXT

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1

Approximately 0.036 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)
N	0.036

Summarize overall biological, chemical and physical functions being performed: A subsurface flow was observed in a sample pit dug between Wetland C and Tributary 2. The water was clear and is evidence of the lateral movement of water between Wetland C and Tributary 2. Several hydrological indicators were observed in Tributary 2 (RPW), including bed and banks, OHWM, and multiple hydrological indicators including a clear natural line impressed on the bank, vegetation matted down, bent, or absent, leaf litter disturbed or washed away, water staining, and sediment sorting. Tributary 2 was followed, back to Tributary 1 where a connection was observed. Tributary 1 is a RPW that flows downhill and downstream west to Potter's Creek (RPW) then Turnagain Arm (TNW). This is evidence that Wetland C support chemical inputs into stream ecology, supports baseline flows, and feeds detritus along wetlands located further downstream of Tributary 1 before emptying into Turnagain Arm.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: A subsurface flow of water was observed in a sample point dug between 0.036-acre Wetland C and Tributary 2. Water flow was observed from the bottom of the hole (approximately 12 inches deep) as well as from approximately 4 inches deep in the hole. The subsurface flow of water is evidence a hydrologic connection between Wetland C and Tributary 2 exists. Several hydrological indicators were observed in Tributary 2, including bed and banks, OHWM, and multiple hydrological indicators including a clear natural line impressed on the bank, vegetation matted down, bent, or absent, leaf litter disturbed or washed away, water staining, and sediment sorting. Tributary 2 has a surface hydrologic connection to Tributary 1, (RPW), which flows to Potter Creek (RPW), then Turnagain Arm, a TNW. The above information is evidence that Wetland C support chemical inputs into stream ecology, supports baseline flows, and feeds detritus along wetlands located further downstream of Tributary 1 before emptying into Turnagain Arm. Wetland C, in combination with Tributaries 1 and 2 has the capacity to transfer nutrients and organic carbon that support downstream foodwebs as well as the capacity to carry pollutants or flood waters to Turnagain Arm (TNW), or to reduce the amount of pollutants or flood waters reaching a TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   ☐TNWs: # linear feet # width (ft), Or, # acres.
   ☐Wetlands adjacent to TNWs: # acres.

2. **RPWs that flow directly or indirectly into TNWs.**

☒Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributary 1 is shown on the USGS Topographic map Anchorage A-8 as a perennial stream.
☒Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: While the APT run the day of the site visit determined that wetter than normal conditions were present, the amount of preceding precipitation would not have resulted in the level of water observed. Additionally, ephemeral tributaries are not common in this area.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒Tributary waters: 326 linear feet 1 width (ft) and 201 linear feet 1 width (ft).
☐Other non-wetland waters: # acres.
Identify type(s) of waters: TEXT

3. Non-RPWs[8] that flow directly or indirectly into TNWs.
☐Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐Tributary waters: #linear feet # width (ft).
☐Other non-wetland waters: # acres.
Identify type(s) of waters:

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
☐Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: TEXT

☐Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: TEXT

Provide acreage estimates for jurisdictional wetlands in the review area: # acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
☒Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.036 acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
☐Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: # acres.

7. Impoundments of jurisdictional waters.[9]
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐Demonstrate that impoundment was created from "waters of the U.S.," or

[8] See Footnote #3.

[9] To complete the analysis refer to the key in Section III D.6 of the Instructional Guidebook.

☐Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

☐Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

☐which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

☐which are or could be used for industrial purposes by industries in interstate commerce.

☐Interstate isolated waters. Explain: TEXT

☐Other factors. Explain: TEXT

Identify water body and summarize rationale supporting determination: TEXT

Provide estimates for jurisdictional waters in the review area (check all that apply):

☐Tributary waters: # linear feet # width (ft).

☐Other non-wetland waters: # acres.

Identify type(s) of waters: TEXT

☐Wetlands: # acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☒Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☒Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Sample holes were dug downslope of Wetland A and Wetland B between the wetlands and the tributary onsite. No subsurface flow was observed in either sample hole.

☐Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐Non-wetland waters (i.e., rivers, streams):

☐Lakes/ponds:

☐Other non-wetland waters:

☒Wetlands: Wetland A - 0.044 acres and Wetland B – 0.033 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).

☐Lakes/ponds:

☐Other non-wetland waters: # acres. List type of aquatic resource: TEXT

☐Wetlands:

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Jurisdiction Following Rapanos*.

☒Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland Delineation Report for Proposed Development of Lots 4 and 5 in Block 2 of the Potter Highlands Subdivision, Anchorage Alaska. Submitted by Travis/Peterson Environmental Consulting August 2021.

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒Office concurs with data sheets/delineation report. USACE concurs with wetland boundaries and presence of streams mentioned in the report, however our site visit determined a longer reach on site for Tributary 2 as well as a connection to Tributary 1.

☐Office does not concur with data sheets/delineation report.

☐Data sheets prepared by the Corps: TEXT

☐Corps navigable waters' study:

☒U.S. Geological Survey Hydrologic Atlas: ☐USGS NHD data.

☒USGS 8 and 12 digit HUC maps.

☐Alaska District's Approved List of Navigable Waters

☒U.S. Geological Survey map(s). Cite scale & quad name: USGS Topographic map for Anchorage A-8 Accessed 02/02/2022

☐USDA Natural Resources Conservation Service Soil Survey. Citation: TEXT

☐National wetlands inventory map(s). Cite name: TEXT

☒State/Local wetland inventory map(s): MOA MapIt! Accessed 02/25/2022

☐FEMA/FIRM maps: TEXT

☐100-year Floodplain Elevation is: TEXT (National Geodectic Vertical Datum of 1929)

☒Photographs: ☐Aerial (Name & Date): TEXT

or ☒Other (Name & Date): Photos from 09/27/2022 Site Visit

☐Previous determination(s). File no. and date of response letter: TEXT

☐Applicable/supporting case law:

☐Applicable/supporting scientific literature:

☐Other information (please specify): TEXT

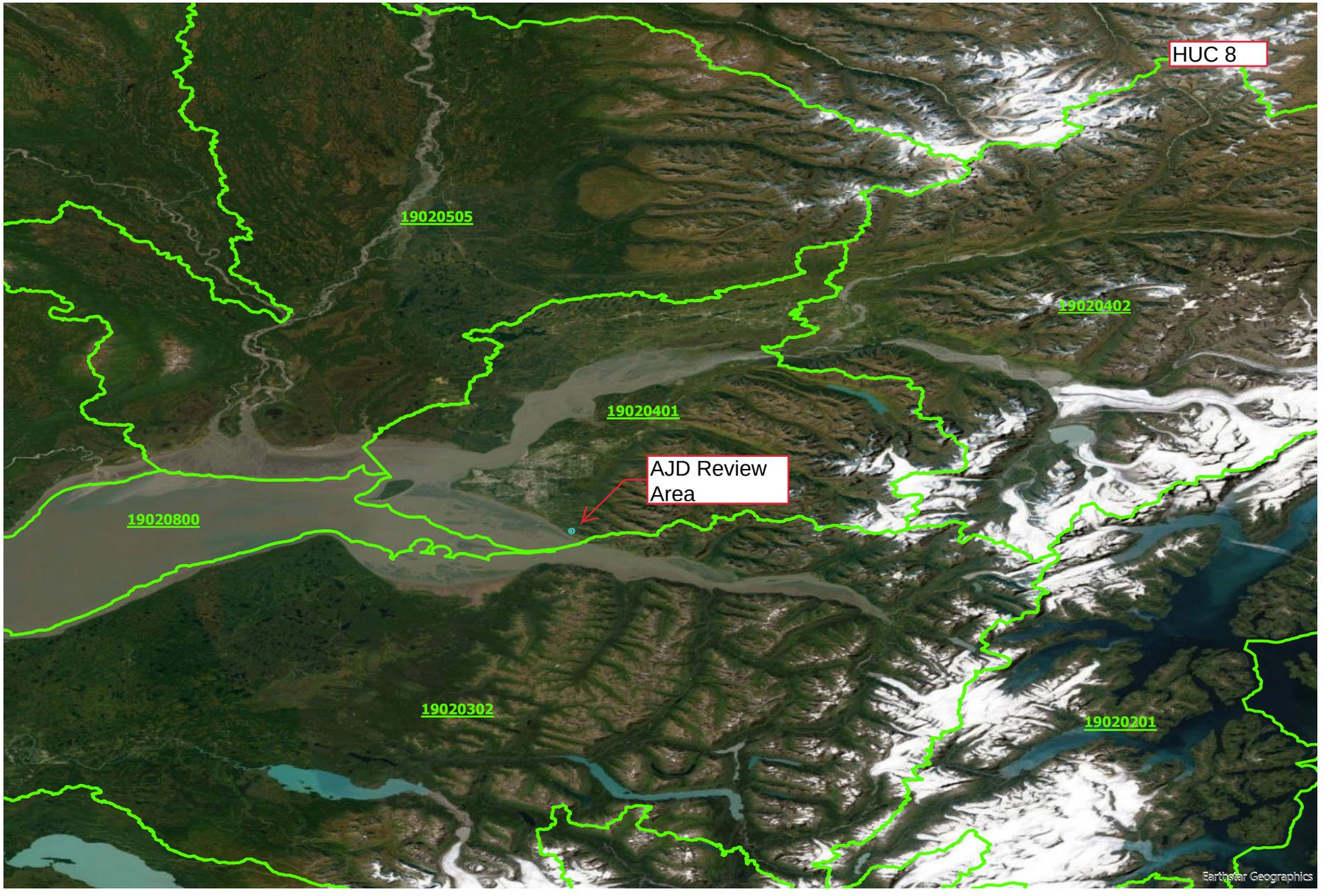
B. ADDITIONAL COMMENTS TO SUPPORT JD: TEXT

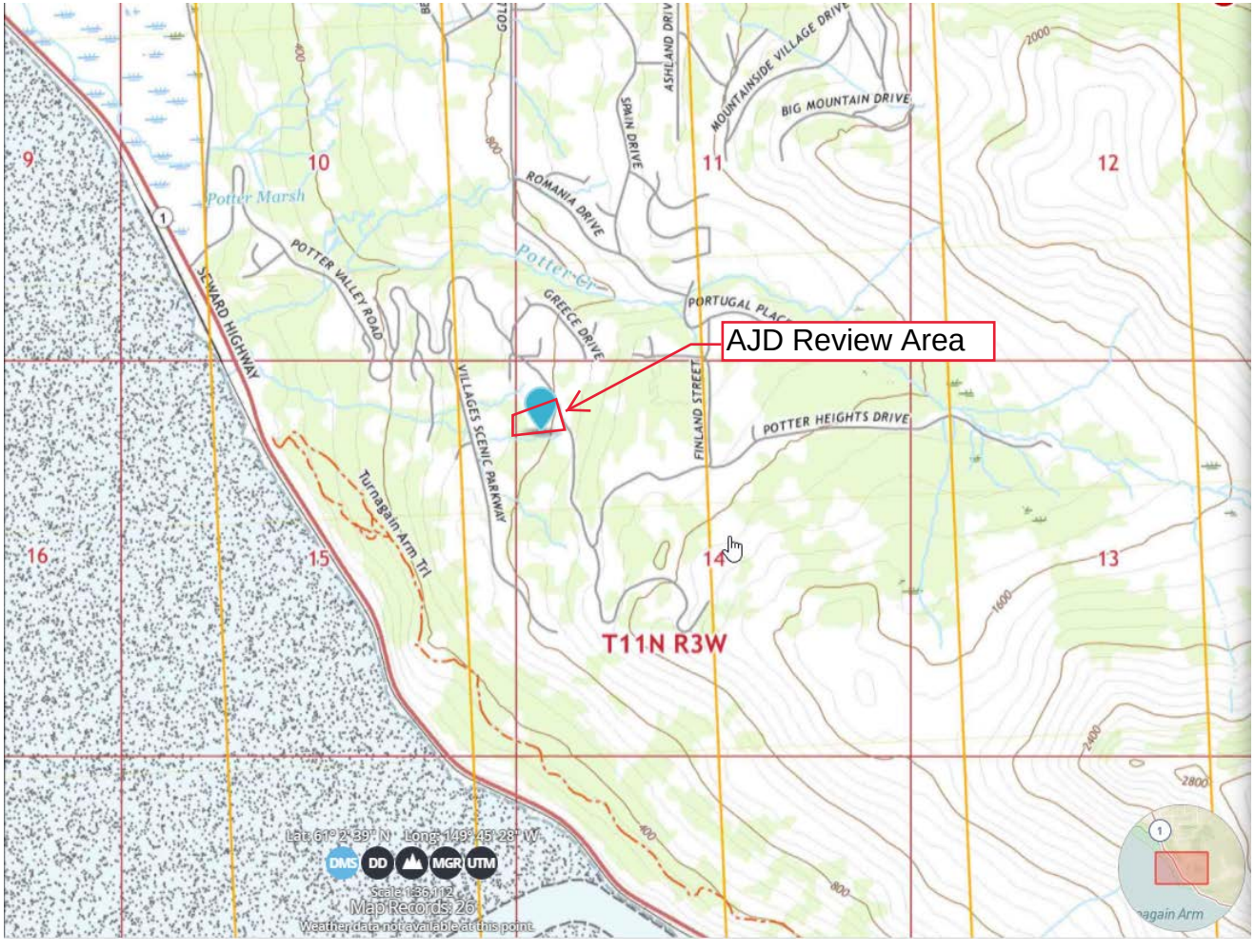
March 29, 2022

Eric White
Regulatory Specialist
SOUTH Section

Date


Wetland A- 0.044 acre
AJD Review Area
Wetland B- 0.033 acre
Wetland C- 0.036 acre
Tributary 1- 326 LF in AJD Review Area
Tributary 2- 201 LF
Microsoft


HUC 8
19020505
19020402
19020401
AJD Review Area
19020800
19020302
19020201
Earthstar Geographics


AJD Review Area
T11N R3W
SEWARD HIGHWAY
POTTER VALLEY ROAD
ROMANIA DRIVE
GREECE DRIVE
PORTUGAL PLACE
FINLAND STREET
POTTER HEIGHTS DRIVE
BIG MOUNTAIN DRIVE
MOUNTAINSIDE VILLAGE DRIVE
ASHLAND DRIVE
SPAIN DRIVE
VILLAGES SCENIC PARKWAY
Turnagain Arm Trl
Potter Marsh
Potter Cr
9
10
11
12
13
14
15
16
Lat: 61° 2' 39" N Long: 149° 45' 28" W
DMS DD MGR UTM
Scale 1:36,112
Map Records: 26
Weather data not available at this point.

2021-00454 MOA MapIt!

2/25/2022, 5:32:07 PM

Image

1:4,514

0 0.03 0.05 0.1 mi

0 0.04 0.08 0.16 km

WMS Wetlands

D - Undesignated

Property Information

500 Scale Grid

Streams

OpenChannel

Municipality of Anchorage, State of Alaska, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA,

MOA GDIC

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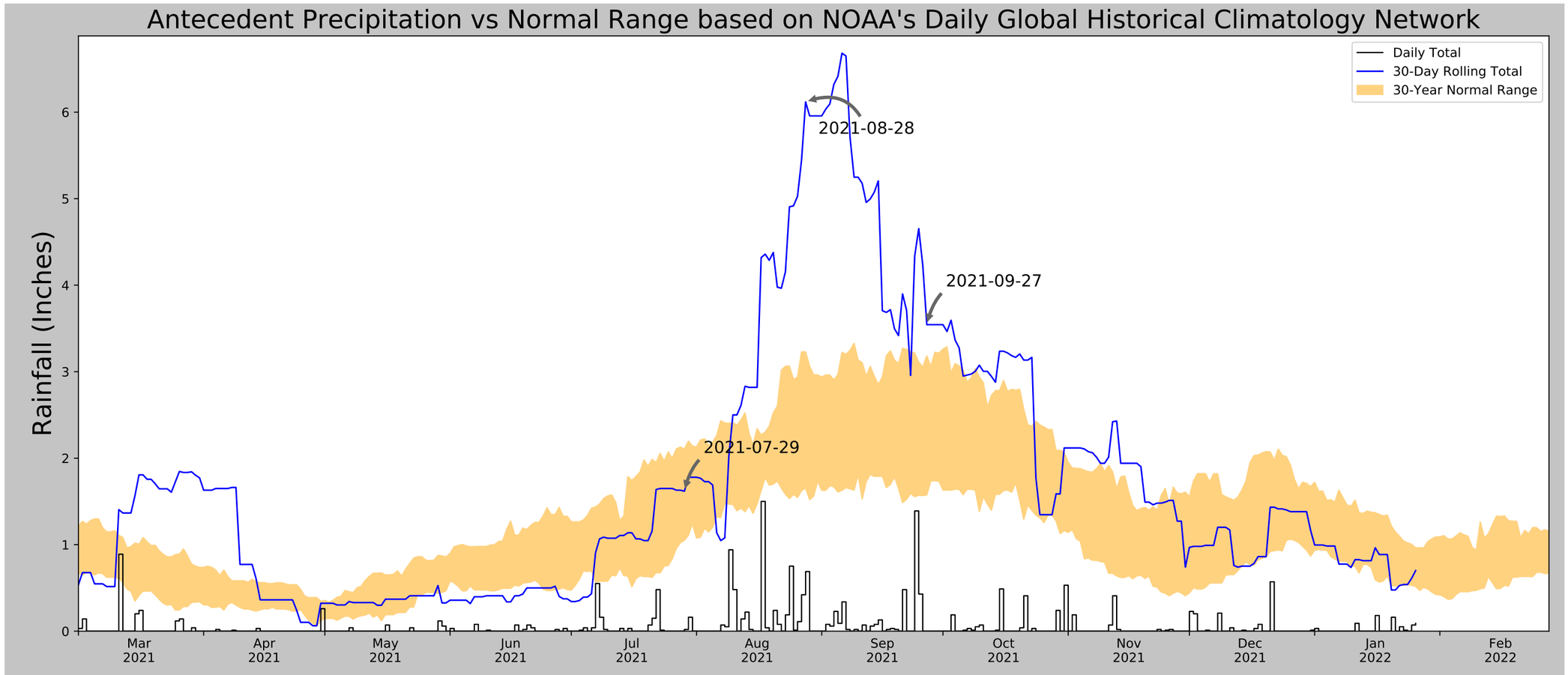

Coordinates	61.048270, -149.770643
Observation Date	2021-09-27
Elevation (ft)	817.75
Drought Index (PDSI)	Not available
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-09-27	1.574803	3.182284	3.543307	Wet	3	3	9
2021-08-28	1.654331	3.22874	6.11811	Wet	3	2	6
2021-07-29	1.050394	2.106299	1.61811	Normal	2	1	2
Result							Wetter than Normal - 17

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
FT RICHARDSON WTP	61.2272, -149.6503	470.144	12.998	347.606	10.367	9920	89
ANCHORAGE 4.8 E	61.2047, -149.7563	229.987	3.854	240.157	2.66	2	0
ANCHORAGE 4.5 E	61.213, -149.7649	224.081	3.936	246.063	2.74	52	0
ANCHORAGE 5.2 SE	61.1926, -149.7542	265.092	4.203	205.052	2.753	1	0
ANCHORAGE 5.0 ESE	61.1945, -149.7573	226.05	4.217	244.094	2.927	1	0
ELMENDORF AFB	61.25, -149.8	191.929	5.22	278.215	3.801	281	0
EAGLE RVR GAKONA CIRCLE	61.3192, -149.5436	566.929	7.277	96.785	3.979	1000	1
CAMPBELL CREEK SCI CTR	61.1639, -149.7778	257.874	6.095	212.27	4.037	48	0
EAGLE RVR 5 SE	61.2967, -149.44	498.032	8.477	27.888	4.051	16	0
ALASKA PACIFIC UNIV	61.1889, -149.8056	220.144	5.806	250.0	4.064	2	0
ANCHORAGE MERRILL FLD	61.2169, -149.855	138.123	6.846	332.021	5.354	30	0