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

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION
A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 9/22/2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2009-874

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Alaska Borough: Municipality City: Anchorage
Center coordinates of site (lat/long in degree decimal format): Lat. 61.08° N., Long. 179.74° W.
Universal Transverse Mercator: NAD 1983 State Plan Alaska 4 FIPS FEET
Name of nearest waterbody: Little Rabbit Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Turnagain Arm
Name of watershed or Hydrologic Unit Code (HUC): 12 digit HUC Rabbit Creek 190-204-010-701.

☒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: September 21, 2017
☒Field Determination. Date(s): September 18, 2017

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 *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.
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

[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.

b. Identify (estimate) size of waters of the U.S. in the review area:
Non-wetland waters: Perennial streams: 8,195.93 linear feet long-3 feet wide. Seasonal streams: 6,847.18 linear feet long-1.5 feet wide. Total jurisdictional Relative Permanent Waters: 15,043.10 liner-feet.

Wetlands: 0.82-acre of palustrine needle-leaved forested wetlands and 107.03 acres of needle-leaved forested/scrub-shrub/emergent wetland complex for a total of 107.85 acres of Jurisdictional Wetlands.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual and Established by the OHWM. 2007 Regional Supplement.
Elevation of established OHWM (if known): Unknown.

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:

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:
Summarize rationale supporting determination:

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent":

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.

---

[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.

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

(i) General Area Conditions:

Watershed size: 12 digit HUC Little Rabbit Creek (190-204-010-701) is 15,153 acres.
Drainage area: Lower Bear Valley (Municipality of Anchorage Watershed 73) drainage area is 1,881 acres.

Average annual rainfall: 16.57 inches (https://www.usclimatedata.com/climate/anchorage/alaska/united-states/usak0012)
Average annual snowfall: 74 inches (https://www.usclimatedata.com/climate/anchorage/alaska/united-states/usak0012)

(ii) Physical Characteristics:

(a) Relationship with TNW:

☒ Tributary flows directly into TNW. Little Rabbit Creek discharges directly into Turnagain Arm (TNW)

☒ Tributaries to Little Rabbit Creek flows through 1-2 tributaries before entering TNW (Turnagain Arm).

Project waters are 3 river miles from TNW.
Project waters are 0 river miles from RPW.
Project waters are 2.3 aerial (straight) miles from TNW.
Project waters are 0 aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. No.

Identify flow route to TNW[5]: Seasonal tributaries (LRC's in Table 1) flow directly either into Little Rabbit Creek (LRC-UR) or into perennial streams (LRCs in Table 1) through the review area. Little Rabbit Creek drains down toward Little Rabbit Creek lower watershed to discharge directly into the Turnagain Arm.

Table 1.

Perennial Streams*	**Linear Feet**
Little Rabbit Creek Upper Reaches (LRC-UR)	905.86
LRC-20-01	3,065.09
LRC-20-07	386.23
LRC-20-X-1	2,644.19
LRC-20-X-2	1,194.56
Total Linear Feet	***8,195.93***
Seasonal Tributaries (LRC')*	
LRC' Tributary LRC-20-X-3	657.07
LRC' Tributary LRC-20-X-4	439.01
LRC' Tributary LRC-20-X-5	1,096.87
LRC' Tributary LRC-20-X-6	427.65
LRC' Tributary LRC-20-X-7	492.21
LRC' Tributary LRC-20-X-8	981.30
LRC' Tributary LRC-20-X-9	1,194.30
LRC Tributary LRC-20-X-10	675.95
LRC Tributary LRC-20-X-11	722.61
LRC Tributary LRC-20-X-12	160.21
Total Linear Feet	***6,847.18***

** Perennial streams are RPW and are jurisdictional as a matter of law, details on these streams are provided in section III.D.2. The following analysis is focused on seasonal tributaries.*

.

Tributary stream order, if known: Seasonal streams are 1 and 2 orders.

[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.

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

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

Tributary properties with respect to top of bank (estimate):
Average width: 1.5 feet
Average depth: 0.5 feet
Average side slopes: 3-5%

Primary tributary substrate composition (check all that apply):

☒Silts ☐Sands ☐Concrete
☐Cobbles ☐Gravel ☒Muck
☐Bedrock ☒Vegetation. 10% cover of aquatic plant species.
☐Other. Explain:

Tributary condition/stability. Explain: Seasonal streams are stable with roots and aquatic vegetation providing stability in the channel. Abuting wetland vegetation provide stability along the banks.
Presence of run/riffle/pool complexes. Explain: Seasonal streams are characterized by small pool/cascade-step systems. Pools contain muck as substrate; cascade-step breaks are created from abrupt slope changes or when large roots across the channel create grade-control points (control of stream bed grade).
Tributary geometry: Relatively Straight due to location in the upper section of the watershed.
Tributary gradient (approximate average slope): 5-8%.

(c) Flow:

Tributary provides for: Seasonal Flows.
Estimate average number of flow events in review area/year: Flows on seasonal streams are continuous during the entire growing season (Cook Inlet – May 8th through October 5th).
Describe flow regime: Seasonal flow regime is continuous through the growing season.
Other information on duration and volume: Seasonal tributaries have flows that last more than 48 hours after rainfall with no indication of turbidity. This seems to evidence groundwater discharges from saturated soils below the water table and/or natural springs discharging into tributaries baseflows.
Surface flow is: Discrete/Confined/Discrete.
Characteristics: Seasonal tributaries contain tannins and flow on mucky/silty substrates with some areas of the channel covered with aquatic mosses or dead leave accumulation.
Subsurface flow: Seasonal streams are narrow and entrenched with water moving deep within the narrow channel or sometimes seeping into the hyporheic zone in some sections of the stream.

☐Dye (or other) test performed: No.

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: in seasonal streams.
☐other (list):	

[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.

☒Discontinuous OHWM.[7] Explain: In some segments of the seasonal streams, flows go deep into the channel's hyporheic zone with flows moving into the shallow subsurface zone, only to be heard but not to be observed visually.

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

☐High Tide Line indicated by:
☐oil or scum line along shore objects
☐fine shell or debris deposits (foreshore)
☐physical markings/characteristics
☐tidal gauges
☐other (list):

☐Mean High Water Mark indicated by:
☐survey to available datum;
☐physical markings;
☐vegetation lines/changes in vegetation types.

(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 and well oxygenated, no indication of oily film or water quality impairments.

Identify specific pollutants, if known: None.

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

☒Riparian corridor. Characteristics (type, average width): Most riparian vegetation along seasonal streams are not clearly differentiated, as these streams run thought large areas of wetland mosaics. These wetlands contain large patches of deciduous vegetation that contribute to leafy material decomposition, organic matter production that eventually is carried into lower watershed sections through the network of seasonal and perennial streams.

☒Wetland fringe. Characteristics: Needle leaved forested/deciduous scrub-shrub/emergent wetlands abut perennial and seasonal streams.

☒Habitat for:

☐Federally Listed species. Explain findings:

☐Fish/spawn areas. Explain findings:

☐Other environmentally-sensitive species. Explain findings:

☒Aquatic/wildlife diversity. Explain findings: The area provides habitat for moose, bear, small mammals, birds of prey, and passerine birds.

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: 0.82-acre of palustrine needle-leaved forested wetlands and 107.03 acres of a needle-leaved forested /scrub-shrub/emergent wetland complex for a total of 107.85 acres of jurisdictional wetlands.

Wetland type. Explain: See above.

Wetland quality. Explain: Pristine wetlands and headwater streams.

Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: Saturated and seasonally flooded wetland mosaics discharge into the network of perennial and seasonal streams.

Surface flow is: Overland Sheet-flow; these wetlands are hydrologically contiguous to jurisdictional streams.

Characteristics: Sheet-flows from natural springs and/or snow/rainfall events.

Subsurface flow: Groundwater supports wetland hydrology and baseline flows of seasonal and perennial streams; several natural springs were observed in the property.

☐Dye (or other) test performed: None.

[7] Ibid.

(c) Wetland Adjacency Determination with Non-TNW:

☒Directly abutting

☐Not directly abutting

☐Discrete wetland hydrologic connection. Explain:

☐Ecological connection. Explain:

☐Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are 3 river miles from TNW.

Project waters are 2.5 aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Water.

Estimate approximate location of wetland as within the 50-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 and of good quality.

Identify specific pollutants, if known: No known pollutants. This is a pristine headwater system.

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

☒Riparian buffer. Characteristics (type, average width): Ranges from wetlands of various widths abutting seasonal streams to riparian corridors easily identifiable in raster imagery along Little Rabbit Creek; the later ranging between 25 feet to 100 feet wide.

☒Vegetation type/percent cover. Explain: Natural vegetation, mainly mosaics of black-spruce forests, scrub-shrub communities with abundant deciduous willows and alders, and grassy wetlands dominated by blue joint grass and water-sedges (forming deep layers of organic matter) are found through the site. Vegetation cover ranges between 60% and 90%. No signs of noxious weed invasion or vegetation cover disturbance were observed during our field visits conducted during the growing season of 2016 and 2017.

☒Habitat for:

☐Federally Listed species. Explain findings: No.

☐Fish/spawn areas. Explain findings: No.

☐Other environmentally-sensitive species. Explain findings: No.

☒Aquatic/wildlife diversity. Explain findings: The area provides habitat for moose, bear, small mammals, birds of prey, and passerine birds.

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

All wetland(s) being considered in the cumulative analysis: There are 5 large wetland polygons included in the analysis for a total of approximately 107.85 acres of wetlands (Figure 1 attached).

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)
Y	0.82
Y	48.17
Y	3.19
Y	1.60
Y	54.07
TOTAL…….	**107.85**

Summarize overall biological, chemical and physical functions being performed: Main functions include habitat for moose, bear, birds of prey, small mammals, and passerine birds. These wetlands support Little Rabbit Creek upper reaches and its headwater tributaries base flows. Due to its high interspersion (complex of forested, shrubby, and grassy wetlands), abundance of bryophytes and seasonally inundated tussock forming grass/sedge communities, these wetlands and seasonal streams produce and export considerable organic matter loads, and support water quality and quantity in the lower sections of the watershed.

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:

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: Upper reaches of Little Rabbit Creek and tributaries with perennial flows contain rapid and well-oxygenated waters throughout the year (see table 1 above). Clear channel beds, banks, and bars with predominance of sand, gravels, and cobbles characterized these streams. Banks along Little Rabbit Creek are clearly identifiable in remote sensing imagery and in the field by the presence of high water tables. Little Rabbit Creek rather narrow floodplain supports a riparian corridor that ranges between 25 feet to 100 feet with abundant overhanging willows and alders. These areas are likely flooded during spring break-up and during late-season rainfall events. High water tables and soils with high content of gravels and coarse sands are found along Little Rabbit Creek's riparian corridors as well. A clear thalweg with incipient riffle-cascade/run/pool sequences are observed along Little Rabbit Creek and its perennial tributaries.

☒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: Flows through the growing season, well defined channels, clear changes in vegetation type, presence of aquatic algae in the channels, fine sediment deposited on and by the side of channels characterize seasonal streams. Another features of these streams include organic drift lines (leaves, twigs, etc.) piled up on the upstream side of channel obstructions, overhanging vegetation, and sustenance of baseflows by natural headwater springs.

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

☒Tributary waters: Perennial streams 8,195.93 linear feet long-3 feet wide; Seasonal streams: 6,847.18 linear feet long-1.5 feet wide for a total of 15,043.10 liner-feet stream channels below the Ordinary High Water Mark.

☐Other non-wetland waters: # acres.

Identify type(s) of waters:

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: TEXT

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: As per Figure 1 attached, complex of wetland types are abutting Relative Permanent Waters as the wetlands boundaries are contiguous with the lateral limits of the tributaries to which they are adjacent.

☒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: As per Figure 1 attached, complex of wetland types are abutting Relative Permanent Waters as the wetlands boundaries are contiguous with the lateral limits of the tributaries to which they are adjacent.

Provide acreage estimates for jurisdictional wetlands in the review area: 107.85 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:

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.

[8] See Footnote #3.

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

☐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:

☐Other factors. Explain:

Identify water body and summarize rationale supporting determination:

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:

☐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: TEXT

☐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): # linear feet # width (ft).

☐Lakes/ponds: # acres.

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

☐Wetlands: # 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: # acres.

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

☐Wetlands: # acres.

---

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

[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*.

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):

☒Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Preliminary Determination of Wetlands and Waters Report of April 4, 2017, and maps provided by Hemlock Inc.

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

☒Office concurs with data sheets/delineation report.

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

☐Data sheets prepared by the Corps:

☐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:

☐USDA Natural Resources Conservation Service Soil Survey. Citation:

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

☐State/Local wetland inventory map(s):

☐FEMA/FIRM maps:

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

☒Photographs: ☒Aerial (Name & Date): Municipality of Anchorage Aerial Imagery
or ☒Other (Name & Date): Field visits of 12 October 2016 and 18 September 2017 (in file)

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

☐Applicable/supporting case law:

☐Applicable/supporting scientific literature:

☐Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: n/a.

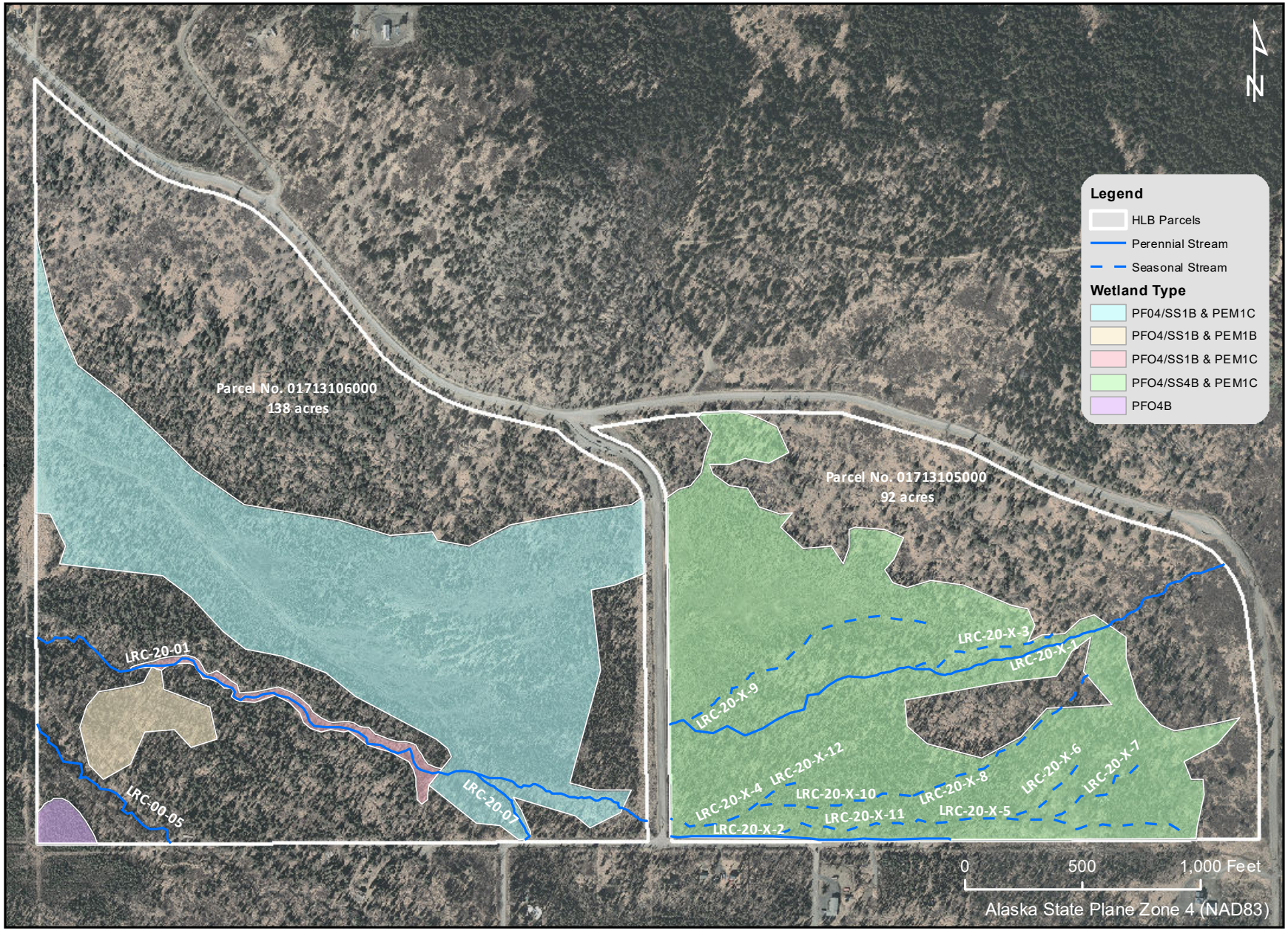
CAMPELLONE.ESTRELLA.F.1268066540

Digitally signed by CAMPELLONE.ESTRELLA.F.1268066540
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=CAMPELLONE.ESTRELLA.F.1268066540
Date: 2017.09.22 18:25:51 -08'00'

Estrella Campellone
Project Manager
Special Actions Branch

9/22/17
Date

Figure 1. Jurisdictional wetlands and relative permanent waters of the U.S. at HLB36.



Information provided by Hemlock Scientific, LLC. September 19, 2017.