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): August 28, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2017-315

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Alaska Borough: Matanuska-Susitna City: Wasilla
Center coordinates of site (lat/long in degree decimal format): Lat. 61.5830 ° N., Long. 149.5394 °W.
Universal Transverse Mercator: 5V
Name of nearest waterbody: Jacobsen Lake
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: the wetland on the applicant's property is not connected to Jacobsen Lake, and Jacobsen Lake is not hydrologically connected to a TNW.
Name of watershed or Hydrologic Unit Code (HUC): 12 digit HUC #190204010501, Lucille Creek watershed, total watershed size 11,983 acres.

☒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: JD was conducted on an adjacent property in 2015, POA-2015-357, for Ms. Nancy Seime.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☒Office (Desk) Determination. Date: August 28, 2017
☒Field/On-Site Determination. Date: August 22, 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.

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:

☐TNWs, including territorial seas
☐Wetlands adjacent to TNWs
☐Relatively permanent waters (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:
Non-wetland waters: none
Wetlands: 0.95 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
Elevation of established OHWM (if known): N/A

2. Non-regulated waters/wetlands:
☒Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Although the property contains waters of the U.S. (WOUS), the wetland does not have connectivity to a TNW, and therefore is not jurisdictional.

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 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

(i) General Area Conditions:
Watershed size: TEXT
Drainage area: TEXT

Average annual rainfall: # inches
Average annual snowfall: # inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐Tributary flows directly into TNW.

☐Tributary flows through CHOOSE: Enter # or 10 or more tributaries before entering TNW.

Project waters are CHOOSE: Enter # or 30 or more river miles from TNW.
Project waters are CHOOSE: Enter # or 30 or more river miles from RPW.
Project waters are CHOOSE: Enter # or 30 or more aerial (straight) miles from TNW.
Project waters are CHOOSE: Enter # or 30 or more aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: TEXT

Identify flow route to TNW: TEXT
Tributary stream order, if known: TEXT

(b) General Tributary Characteristics:

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

Tributary properties with respect to top of bank (estimate):
Average width: # feet
Average depth: # 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: TEXT
Tributary geometry: CHOOSE: Relatively Straight/Meandering
Tributary gradient (approximate average slope): #%

(c) Flow:

Tributary provides for: CHOOSE: Seasonal Flow/Intermittent but not Seasonal Flow/Ephemeral Flow
Estimate average number of flow events in review area/year: CHOOSE: Enter # or 20 (or greater)
Describe flow regime: TEXT
Other information on duration and volume: TEXT
Surface flow is: CHOOSE: Discrete/Confined/Discrete and Confined/Overland Sheetflow Characteristics: TEXT
Subsurface flow: CHOOSE: Yes/No/Unknown Explain findings: TEXT
☐Dye (or other) test performed: TEXT

Tributary has (check all that apply):
☐Bed and banks
☐OHWM:

☐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): TEXT
☐Discontinuous OHWM. 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:
☐oil or scum line along shore objects
☐fine shell or debris deposits (foreshore)
☐physical markings/characteristics
☐tidal gauges
☐other

☐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: TEXT
Identify specific pollutants, if known: TEXT

(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) <u>General Wetland Characteristics:</u>

Properties:
Wetland size: # acres
Wetland type. Explain: TEXT
Wetland quality. Explain: TEXT
Project wetlands cross or serve as state boundaries. Explain: TEXT

(b) <u>General Flow Relationship with Non-TNW:</u>

Flow is: Choose an item. Explain: TEXT
Surface flow is: CHOOSE: Discrete/Confined/Discrete and Confined/Overland Sheetflow
Characteristics: TEXT
Subsurface flow: CHOOSE: Yes/No/Unknown Explain findings: TEXT
☐Dye (or other) test performed: TEXT

(c) <u>Wetland Adjacency Determination with Non-TNW:</u>

☐Directly abutting
☐Not directly abutting
☐Discrete wetland hydrologic connection. Explain: TEXT
☐Ecological connection. Explain: TEXT
☐Separated by berm/barrier. Explain: TEXT

(d) <u>Proximity (Relationship) to TNW</u>

Project wetlands are CHOOSE: Enter # or 30 or more river miles from TNW.
Project waters are CHOOSE: Enter # or 30 or more aerial (straight) miles from TNW.
Flow is from: CHOOSE: Wetland to Navigable Water/Navigable Water to Wetland/Wetland to/from Navigable Water/No Flow
Estimate approximate location of wetland as within the CHOOSE: Enter # or 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: TEXT

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: 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

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

All wetland(s) being considered in the cumulative analysis: CHOOSE: Enter # or 30 or more

Approximately (#) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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

Summarize overall biological, chemical and physical functions being performed: TEXT

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: TEXT
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: TEXT
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: TEXT

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

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: TEXT

☐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: 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

3. Non-RPWs 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: 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

☐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:
☐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: Wetlands on applicant's property connect to neighbor's property through a culvert to the east, but neither of these wetlands connect to an RPW or TNW. A wetland delineation and jurisdictional determination were conducted on the neighbor's property to the east, POA-2015-357, and this property was determined to be jurisdictional at the time. Jurisdiction was based on groundwater flow, which is no longer considered a valid method of establishing hydrologic connectivity. Therefore, both the neighbor's wetland (delineated in 2015) and the Coghlan property contain isolated wetlands.

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:
☐Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
☐Lakes/ponds: # acres.
☐Other non-wetland waters: # acres. List type of aquatic resource: TEXT
☒Wetlands: 0.95 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:

☐Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
☐Lakes/ponds: # acres.
☐Other non-wetland waters: # acres. List type of aquatic resource: TEXT
☒Wetlands: 0.95 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD:

☒Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Coghlan Estates plat map, 9/7/2007
☐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: TEXT
☐Corps navigable waters' study: TEXT
☐U.S. Geological Survey Hydrologic Atlas: TEXT
☐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: TEXT
☒USDA Natural Resources Conservation Service Soil Survey. Citation: Unit 122, Deception silt loam, rolling, survey area data 09/27/2015, accessed 8/23/2017
☒National wetlands inventory map. Cite name: PSS1/4B, Freshwater Forested/Shrub wetland, accessed 8/8/2017
☒State/Local wetland inventory map: Cook Inlet kettle, accessed 8/8/2017 via SimSuite
☐FEMA/FIRM maps: TEXT
☐100-year Floodplain Elevation is: TEXT (National Geodectic Vertical Datum of 1929)
☒Photographs: ☒Aerial (Name & Date): Google Earth, accessed 8/8/2017
or ☐Other (Name & Date): TEXT
☒Previous determination. File no. and date of response letter: File # POA-2015-357 was used as a reference. This property is directly to the east of the Coghlan property and connected by a culvert.
☐Applicable/supporting case law: TEXT
☐Applicable/supporting scientific literature:

Amanda L Heath

FOR: Julie Ruth
Regulatory Specialist
South Section

September 20, 2017
Date