

**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):** December 19, 2016

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Alaska District, POA-2016-541

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Alaska                      Borough: Municipality of Anchorage                      City: Anchorage  
Center coordinates of site: Lat. 61.1672° N., Long. 149.8420°W.  
Universal Transverse Mercator: 6V  
Name of nearest waterbody: North Fork of Little Campbell Creek  
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Campbell Lake  
Name of watershed or Hydrologic Unit Code (HUC): 1902040106

- 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:**

- Office (Desk) Determination.                      Date: December 19, 2016  
 Field Determination.                      Date: Performed by DOWL October 5, 2016

**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:**

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs: A man-made water feature is present to the west and north of the project area, and the feature flows into the MOA storm drain system in the project area at the corner of Dowling Road and Petersburg Street.  
 Non-RPWs that flow directly or indirectly into TNWs  
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs: the 1.8 acre wetland directly abuts the drainage feature to the north.  
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs: The 0.21 acre wetland in the project area is adjacent to the water feature on the west side of the property. This water feature is an RPW that flows indirectly into a TNW.  
 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: about 50 feet of the water feature crosses into the project area

Wetlands: 2.01 acres.

c. **Limits (boundaries) of jurisdiction based on:** 1987 Delineation Manual, and Alaska Regional Supplement to the Corps of Engineers Wetland Delineation Manual (version 2.0, 2007)

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

**2. Non-regulated waters/wetlands (check if applicable):**

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

Explain: N/A

**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: No TNW in project area

Summarize rationale supporting determination: N/A

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": N/A

**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: 45,185 acres for HUC 10

Drainage area: same

Average annual rainfall: rainfall for 2016 is roughly average

Average annual snowfall: 50 inches in the winter of 2015-2016, which is below average, 74.5 inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

- Tributary flows directly into TNW.  
 Tributary flows through: 2 tributaries before entering TNW.

Project waters are: 4 river miles from TNW.

Project waters are: 0.7 river miles from RPW.

Project waters are: 3 aerial (straight) miles from TNW.

Project waters are: water feature in project area enters storm drain system, and discharges into North Fork of Little Campbell Creek, an RPW, 3,000 feet south from the project area. The water then flows into Campbell Creek 1,100 feet downstream, then into another RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW: The water feature within the study area is an RPW that drains directly into the storm drain system and is eventually discharged in the North Fork of Little Campbell Creek, another RPW. The North Fork of Little Campbell Creek flows into Campbell Creek about 1,100 feet downstream, and eventually flows into Campbell Lake, and then Cook Inlet.

Tributary stream order, if known: 2nd

(b) General Tributary Characteristics:

**Tributary is:**  Natural

Artificial (man-made). Explain: The water feature in the project area is likely man-made as it is straight and absent in aerial photographs from 1984.

Manipulated (man-altered). Explain:

**Tributary properties with respect to top of bank (estimate):**

Average width: 1 foot

Average depth: 0.5 foot

Average side slopes: 1 foot

**Primary tributary substrate composition:**

Silts  Sands  Concrete

Cobbles  Gravel  Muck

Bedrock  Vegetation. Type/% cover:

Other. Explain:

Tributary condition/stability: eroded

Presence of run/riffle/pool complexes. Explain: none

Tributary geometry: Straight

Tributary gradient (approximate average slope): 20%

(c) Flow:

Tributary provides for Perennial Flow

Estimate average number of flow events in review area/year:

Describe flow regime:

Other information on duration and volume:

Surface flow is: discrete and confined

Characteristics:

Subsurface flow: Unknown Explain findings:

Dye (or other) test performed: N/A

Tributary has:

Bed and banks

OHWM:

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

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:

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

**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: 2.01 acres total: one wetland is 1.8 acres, and the other is 0.21 acre

Wetland type. Explain: NWI classifies 1.8 acre wetland as PEM1/SS1B, palustrine emergent scrub-shrub

NWI classifies 0.21 acre wetland as PSS1B, freshwater forested/shrub wetland

Wetland quality. Explain: MOA considers the 1.8 acre wetland Class C, low valuation, and does not have the 0.21 acre wetland mapped

Project wetlands cross or serve as state boundaries. Explain: N/A

**(b) General Flow Relationship with Non-TNW:**

Surface flow is: Discrete and Confined

Characteristics: water flows through man-made ditch into storm drain

Subsurface flow: Unknown Explain findings:

Dye (or other) test performed: N/A

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

- Discrete wetland hydrologic connection. Explain: wetland is about 100 feet from entry point for MOA storm drain system which empties into the north fork of Little Campbell Creek
- Ecological connection. Explain:
- Separated by berm/barrier. Explain: N/A

(d) Proximity (Relationship) to TNW

Project wetlands are: 4 river miles from TNW.  
 Project waters are: 3 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 is clear  
 Identify specific pollutants, if known: unknown

(iii) **Biological Characteristics. Wetland supports:**

- Riparian buffer. Characteristics (type, average width): N/A
- Vegetation type/percent cover. Explain: The 1.8 acre wetland is dominated by Sweetgale, *Myrica gale*, bluejoint reedgrass, *Calamogrosis Canadensis*, and a shrub layer including bog rosemary, *Andromeda polifolia*. The 0.21 acre wetland contains sedge tussocks, *Carex utriculata*, *C. lasiocarpa*, and other herbaceous plants.
- Habitat for:
  - Federally Listed species. Explain findings: N/A
  - Fish/spawn areas. Explain findings: N/A
  - Other environmentally-sensitive species. Explain findings: N/A
  - Aquatic/wildlife diversity. Explain findings: likely habitat for birds, moose, small mammals

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

All wetlands being considered in the cumulative analysis  
 Approximately 2.01 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)
N	1.8
N	0.21

Summarize overall biological, chemical and physical functions being performed: Wetlands provide habitat and food for wildlife, storm water, sediment and nutrient retention, groundwater recharge, and flood protection.

**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? Yes
- Does the tributary, in combination with its adjacent wetlands 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? No
- Does the tributary, in combination with its adjacent wetlands have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? Yes
- Does the tributary, in combination with its adjacent wetlands have other relationships to the physical, chemical, or biological integrity of the TNW? No

*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: Wetland is immediately adjacent to water feature, about 100 feet in distance, and most likely has a groundwater connection.  
The wetlands serve important functions to the Campbell Creek watershed, including flood attenuation and water storage. The wetlands have flood attenuating effects by storing water from precipitation or from seepages and up gradient slopes, then releasing it down slope in a manner that high peak flows are minimized. The wetlands also play an important role in trapping sediments, controlling erosion, and providing nutrient removal and chemical detoxification for an expanding urban area.

**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: photographs in DOWL report
- 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:

Provide estimates for jurisdictional waters in the review area:

- Tributary waters: 50 linear feet 1 width (ft).
- Other non-wetland waters:

Identify type(s) of waters:

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:

- 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: the 1.8 acre wetland directly abuts an RPW.

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:

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:

Provide acreage estimates for jurisdictional wetlands in the review area: # acres. *2.01*

**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. *this one is 0.21*

Provide acreage estimates for jurisdictional wetlands in the review area: 2.01 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 (CHECK ALL THAT APPLY):**

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:

Tributary waters:

Other non-wetland waters: # acres.

Identify type(s) of waters:

Wetlands

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:**

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:
- 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):

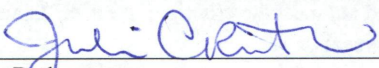
- Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).
- Lakes/ponds: # acres.
- Other non-wetland waters: # acres. List type of aquatic resource:
- Wetlands: # acres.

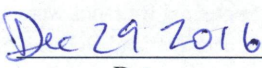
**SECTION IV: DATA SOURCES.**

**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: DOWL JL Dowling Road/Lake Otis Parkway Wetland Delineation Report, November 2016
- 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: Unit 424, Icknuun peat, 0-3% slopes, August 2011
- National wetlands inventory map(s). Cite name: PSS1B and PEM1/SS1B, September 2002
- State/Local wetland inventory map(s): Municipality of Anchorage Wetland Mapping, Class C low valuation wetlands, 2014
- FEMA/FIRM maps: not in flood zone, September 2009
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):  
or  Other (Name & Date):
- Previous determination(s). File no. and date of response letter: N/A
- Applicable/supporting case law: N/A
- Applicable/supporting scientific literature: N/A
- Other information: N/A

**B. ADDITIONAL COMMENTS TO SUPPORT JD: N/A**

  
 \_\_\_\_\_  
 Julie Ruth  
 Regulatory Specialist  
 SOUTH Section

  
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 Date