

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

## SECTION I: BACKGROUND INFORMATION

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**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 03-Jul-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Alaska District, POA-2008-00849-JD2

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

State : AK - Alaska  
 County/parish/borough: Fairbanks North Star  
 City: Ester  
 Lat: 64.8222  
 Long: -148.1654  
 Universal Transverse Mercator: []  
 Name of nearest waterbody: Alder Creek  
 Name of nearest Traditional Navigable Water (TNW): Chena River  
 Name of watershed or Hydrologic Unit Code (HUC):



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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



Office Determination Date: 23-Jun-2008



Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

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**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There  "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  "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:<sup>1</sup>**

Water Name	Water Type(s) Present
POA-2008-849, Unnamed Tributary	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)  
 Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: 1987 Delineation Manual.  
 OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

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

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

**1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

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

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

**(i) General Area Conditions:**

Watershed size: .75 square miles  
 Drainage area: .75 square miles  
 Average annual rainfall: 11 inches  
 Average annual snowfall: 65 inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

- Tributary flows directly into TNW.
- Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 5-10 river miles from TNW.  
 Project waters are 5-10 river miles from RPW.  
 Project Waters are 5-10 aerial (straight) miles from TNW.  
 Project waters are 5-10 aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

The Unnamed Tributary, an RPW, flows into Alder Creek, an RPW. Alder Creek flows into Cripple Creek, an RPW. Cripple Creek is a direct tributary of the Chena River, a TNW on the Alaska District List of Traditional Navigable Waters.

**Tributary Stream Order, if known:**

Order	Tributary Name
1	POA-2008-849, Unnamed Tributary

**(b) General Tributary Characteristics:**

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated
POA-2008-849, Unnamed Tributary	X	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Silt
POA-2008-849, Unnamed Tributary	-	-	-

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Veget
POA-2008-849, Unnamed Tributary	-	-	-	-	-	-	-	X

**Vegetation Explained:**

Tributary Name	Percent Cover	Vegetation Explained
POA-2008-849, Unnamed Tributary	90	Broad-Leaved Deciduous/Needle-Leaved Evergreen

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition\Stability	Run\Riffle\Pool Complexes	Geometry
POA-2008-849, Unnamed Tributary	-	-	Relatively straight

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Durati
POA-2008-849, Unnamed Tributary	Seasonal flow	6-10	-	-

**Surface Flow is:**

Tributary Name	Surface Flow	Charact
POA-2008-849, Unnamed Tributary	-	-

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or
POA-2008-849, Unnamed Tributary	-	-	

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous

			OHWM <sup>7</sup>
POA-2008-849, Unnamed Tributary	X	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable.

Mean High Water Mark indicated by:

Not Applicable.

(iii) Chemical Characteristics:

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

Tributary Name	Explain	Identify specific pollutants, if known
POA-2008-849, Unnamed Tributary	-	-

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics
POA-2008-849, Unnamed Tributary	-	-	-	-

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:

Not Applicable.

Surface flow is:

Not Applicable.

Subsurface flow:

Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:

Not Applicable.

(d) Proximity (Relationship) to TNW:

Not Applicable.

(ii) Chemical Characteristics:

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

Not Applicable.

(iii) Biological Characteristics. Wetland supports:

Not Applicable.

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

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

**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.

**Findings for:** POA-2008-849, Unnamed Tributary

The Unnamed Tributary, an RPW, and its adjacent wetlands have the capability of providing contaminant and sediment filtration for downstream tributaries. The Unnamed Tributary and its adjacent wetlands have the capability of providing vegetative matter for downstream biota. The Unnamed Tributary and its adjacent wetlands provide flood/stormwater retention for the drainage area and add to the baseflow of Alder Creek.

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:****1. TNWs and Adjacent Wetlands:**

Not Applicable.

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

Wetland Name	Flow	Explain
POA-2008-849, Unnamed Tributary	SEASONAL	The Unnamed Tributary is classified by the National Wetland Inventory Cowardin system as Riverine, Intermittent, Streambed, Seasonally Flooded. The Unnamed Tributary provides a pathway for melt water and heavy precipitation.

**Provide estimates for jurisdictional waters in the review area:**

Wetland Name	Type	Size (Linear) (m)
POA-2008-849, Unnamed Tributary	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	480.06
<b>Total:</b>		<b>480.06</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Not Applicable.

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

Not Applicable.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

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

Not Applicable.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

#### **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):

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

Not Applicable.

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.

Not Applicable.

## SECTION IV: DATA SOURCES.

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	overview topo; overview topo w/ aerial; overview t layout; two site photos w/ map; location map
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	Soil Core Logs	11 soil core log datasheets (via Design Alaska) w/
--U.S. Geological Survey map(s).	USGS Fairbanks D-3	scale = 1:63,360
--USDA Natural Resources Conservation Service Soil Survey.	Greater Nenana Area	via GIS
--National wetlands inventory map(s).	NWI	via GIS
--Photographs	-	-
----Aerial	Fairbanks # 5-1	dated: 5-7-97; scale: 1"=2500'
----Other	-	FNSB GIS Ortho Quad 2007; Google Earth image

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-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).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-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.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever 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.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-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 Act Jurisdiction Following Rapanos.