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

<u>SECTION I: BACKGROUND INFORMATION</u>
A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 30, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2017-359

	ATION AND BACKGROUND INFORMATION:	
State: Alaska	Borough: Mat-Su City: Palmer Site (lat/long in degree decimal format): Lat. 61.6945 ° N., Long. 149.2692 °W.	
Universal Transverse	Harrier III 이용하면 16. 프라이터 16. 프라이트 16. 프	
	rbody: Little Susitna River	
	itional Navigable Water (TNW) into which the aquatic resource flows: Little Susitna River	
	r Hydrologic Unit Code (HUC): 1902050512	
⊠Check if map/diag	am of review area and/or potential jurisdictional areas is/are available upon request.	
☐ Check if other sites different JD form	(e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a	
D. REVIEW PERF	ORMED FOR SITE EVALUATION:	
⊠Office (Desk) Dete	rmination. Date: October 30, 2017	
□ Field Determinatio	n. Date: September 26, 2017	
SECTION II: SUM	MARY OF FINDINGS	
A. RHA SECTION	10 DETERMINATION OF JURISDICTION.	
There are no "naviga	ble waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 32	9)
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:	
	404 DETERMINATION OF JURISDICTION.	
	the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area	1.
1. Waters		
	te presence of waters of U.S. in review area:	
	acluding territorial seas	
	adjacent to TNWs	
	y permanent waters (RPWs) that flow directly or indirectly into TNWs	
	Vs that flow directly or indirectly into TNWs	
	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	
□Impound	nents of jurisdictional waters	
☐ Isolated (interstate or intrastate) waters, including isolated wetlands	
	entify (estimate) size of waters of the U.S. in the review area:	
	on-wetland waters:	
V	etlands: 2.22-acres	

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

Supplement Elevation of established OHWM:

c.

2. Non-regulated waters/wetlands:

□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:

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:

Drainage area:

Average annual rainfall: Average annual snowfall:

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 2 tributaries before entering	INW.
Project waters are river miles from TNW.	
Project waters are river miles from RPW.	
Project waters are aerial (straight) miles from TNW.	
Project waters are aerial (straight) miles from RPW.	
Project waters cross or serve as state boundaries. Expla	in:
Identify flow route to TNW:	
Tributary stream order, if known:	
(b) General Tributary Characteristics:	
Tributary is:	
□ Artificial (man-made). Explain:	
☐Manipulated (man-altered). Explain	u.
Tributary properties with respect to top of bank (estin	nate):
Average width: feet	
Average depth: feet	
Average side slopes: Choose an item.	
Primary tributary substrate composition:	
□Silts □Sands □Concrete	
□Cobbles □Gravel □Muck	
☐ Bedrock ☐ Vegetation. Type/% cover: unknow	vn
☐ Other. Explain:	
Tributary condition/stability [e.g., highly eroding, sloup Presence of run/riffle/pool complexes. Explain: Tributary geometry: Tributary gradient (approximate average slope):	ghing banks]. Explain:
(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:	
Characteristics:	
Subsurface flow Explain findings: Dye (or other) test performed:	
□Dye (or other) test performed.	
Tributary has: ☐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
□other (list):	
□ Discontinuous OHWM. Explain:	
Discontinuous OH w. Explain:	

	☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
	oil or scum line along shore objects	□ survey to available datum;
	☐ fine shell or debris deposits (foreshore)	□ physical markings;
	□ physical markings/characteristics	□ vegetation lines/changes in vegetation types.
	□tidal gauges	
	□other (list):	
	(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:	
	☐ 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:	
	Wetland type. Explain:	
	Wetland quality. Explain:	
	Project wetlands cross or serve as state boundaries. Exp	olain:
	(b) General Flow Relationship with Non-TNW:	
	Flow is: Seasonal Explain:	
	Surface flow is:	
	Characteristics:	
	Subsurface flow: No	
	☐ Dye (or other) test performed:	
	(c) Wetland Adjacency Determination with Non-TNW:	
	☐ Directly abutting	
	☐ Not directly abutting	
	☐ Discrete wetland hydrologic connection. Explain:	이 경기 생활을 가득했다고 하는 동생이 되는 것이다.
	☐ Ecological connection. Explain:	
	☐ Separated by berm/barrier. Explain:	
	(d) Proximity (Relationship) to TNW	
	Project wetlands are river miles from TNW.	
	Project waters are aerial (straight) miles from TNW.	
	(ii) Chemical Characteristics:	
	Characterize wetland system (e.g., water color is clear, bro	wn, oil film on surface; water quality; general watershed
	characteristics; etc.). Explain:	
	Identify enecific nellutants if known:	

(III) Diological Characte	ristics. Wetland support		
☐ Riparian buffer. Ch	naracteristics (type, averag	e width):	
□ Vegetation type/per	cent cover. Explain: Habi	tat for:	
☐ Federally Lis	ted species. Explain finding	ngs:	
□Fish/spawn a	reas. Explain findings:		
☐ Other enviror	nmentally-sensitive species	s. Explain findings:	
☐ Aquatic/wild	life diversity. Explain find	lings:	
Characteristics of all we	tlands adjacent to the tri nsidered in the cumulative		
	total are being considered	in the cumulative analysis.	
		in the cumulative analysis.	

Summarize overall biological, chemical and physical functions being performed:

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:

- 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:
- 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:

1.	TNWs and Adjacent Wetlands. 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: The wetlands drain directly into unnamed Creek 1 (ADF&G Creek Number 247-41-10100-2349-3003-4012) which flows southwest into unnamed Creek 2 (ADF&G 247-41-10100-2349) which flows into Little Susitna River a TNW. 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 (check all that apply): Tributary waters: linear feet width (ft).
	Other non-wetland waters: acres.
	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. ⊠Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationals indicating that tributary is perennial in Section III.D.2, above. Provide rationals indicating that wetland is directly abutting an RPW: The wetland complex flows directly into unnamed Creek 1 (ADF&G Creek Number 247-41-10100-2349-3003-4012).
	☐ 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.
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:
Identify water body and summarize rationale supporting determination:
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: ☐ Wetlands: acres.
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: 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: 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: □ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
 ☑ Data sheets prepared/submitted by or on behalf of the applicant/consultant. ☑ Office concurs with data sheets/delineation report. (The Corps agrees with the delineations conclusion) ☑ 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):
or ⊠Other (Name & Date): Applicant supplied, September 26, 2017
⊠Previous determination(s). File no. and date of response letter: POA-2006-834 dated January 9, 2007 and POA-2017-359
dated August 14, 2017
☐ Applicable/supporting case law:
□ Applicable/supporting scientific literature:
☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: The AJD area is a small part of a larger wetland complex that drains into unnamed creek #1.