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.	DACKCDOUM	TATEODMATION
SECTION I:	BACKGROUND	INFORMATION

A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD)	: December 4	, 2015
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-	DDOTECTI	OCHTION IND	DICKODOLIND	INFORMATION:

State: Alaska Borough: Matanuska-Susitna Borough City: Willow
Center coordinates of site (lat/long in degree decimal format): Lat. 61.73890° N, Long. 150.06019° W
Universal Transverse Mercator: Seward
Name of nearest waterbody: Willow Lake
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Willow Creek
Name of watershed or Hydrologic Unit Code (HUC): 1902050506 – Willow Creek

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) are associated with this action and are recorded on a different JD form

REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY)

✓ Office (Desk) Determination. Date: December 4, 2015 .
 ✓ Field Determination. Date(s): Click here to enter a date., Click here to enter a date.

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. [Required]

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: Click here to enter text.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

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
Γ	Wetlands adjacent to TNWs
Γ	Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs
Γ	Non-RPWs that flow directly or indirectly into TNWs
Γ	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
Γ	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
Γ	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Γ	Impoundments of jurisdictional waters
1	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: # linear feet: # width (ft) and/or # acres.

Non-wetland waters: # linear feet: # width (ft) and/or # acres. Wetlands: # acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.

Elevation of established OHWM (if known): Click here to enter text.

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: Click here to enter text.

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: Click here to enter text.

Summarize rationale supporting determination: Click here to enter text.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Click here to enter 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

General Area Conditions: Watershed size: # Choose an item. Drainage area: # Choose an item. Average annual rainfall: # inches Average annual snowfall: # inches Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Choose an item. tributaries before entering TNW. Project waters are Choose an item. river miles from TNW. Project waters are Choose an item. river miles from RPW. Project waters are Choose an item. aerial (straight) miles from TNW. Project waters are Choose an item. aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Click here to enter text. Identify flow route to TNW: Click here to enter text. Tributary stream order, if known: Click here to enter text. General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Click here to enter text. Manipulated (man-altered). Explain: Click here to enter text.

Tributary properties with respect to top of bank (estimate): Average width: # feet

Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Muck Gravel Vegetation. Type/% cover: Click here to enter text. Bedrock Other, Explain: Click here to enter text. Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Click here to enter text. Presence of run/riffle/pool complexes. Explain: Click here to enter text. Tributary geometry: Choose an item. Tributary gradient (approximate average slope): #% (c) Flow: Tributary provides for: Choose an item. Estimate average number of flow events in review area/year; Choose an item. Describe flow regime: Click here to enter text. Other information on duration and volume: Click here to enter text. Surface flow is: Choose an item. Characteristics: Click here to enter text. Subsurface flow: Choose an item. Explain findings: Click here to enter text. Dye (or other) test performed; Click here to enter text. Tributary has (check all that apply): Bed and banks OHWM (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 the presence of wrack line | shelving vegetation matted down, bent, or absent | sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events abrupt change in plant community Click here to enter text. water staining other (list): Click here to enter text. Discontinuous OHWM. Explain: Click here to enter text. If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): Mean High Water Mark indicated by: High Tide Line 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. T tidal gauges other (list): Click here to enter text. (iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics). Explain: Click here to enter text. Identify specific pollutants, if known: Click here to enter text. (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Click here to enter text. Wetland fringe. Characteristics: Click here to enter text. Habitat for: Federally Listed species. Explain findings: Click here to enter text.

Average depth: # feet

Average side slopes: Choose an item.

		Γ	Fish/spawn areas, E	xplain findings: Click here	to enter text.		
		Γ	Other environmenta	lly-sensitive species. Ex	olain findings: Click here to enter t	ext.	
		Γ		ersity. Explain findings:			
Ch	aract	erist			ow directly or indirectly into T	NW	
			3			7.2 M2	
(i)	Phy		Characteristics:	8 V			
	(a)		ieral Wetland Charact perties:	eristics:			
			Wetland size: # acres				*
				in: Click here to enter text.	v v		
		Pro	wettand quality. Expict wetlands cross or	olain: Click here to enter tex serve as state boundaries	t. Explain: Click here to enter text.	gg Vil	
	(b)		eral Flow Relationsh		*		
	(0)			Explain: Click here to enter	text.		
		Sur	face flow is: Choose an	ı item.			
			Characteristics: Click	here to enter text.			
				<i>m item</i> . Explain findings:			
			Dye (or other) te	st performed: Click here to	enter text.		
	(c)	Wet		rmination with Non-TNV	<u>/:</u>		
			Directly abutting				¥C.
			Not directly abutting	-			
			e su di	8 (3)	on. Explain: Click here to enter tex	t.	
				onnection. Explain: Click			
			Separated by	berm/barrier. Explain: (Click here to enter text.		
	(d)		ximity (Relationship)				
				ose an item. river miles from			
			w is from: Choose an it	an item. aerial (straight) n	mes nom in w.		
					n the Choose an item. floodplain.		
(ii)			l Characteristics:				
	Cha				brown, oil film on surface; water	quality; general watershed charac	teristics
	Ider		lain: Click here to enter specific pollutants, if	text. known: Click here to enter	lext.	one d	
/iii				Vetland supports (check			
(111) DIO				idth); Click here to enter text.		
	Г			cover. Explain: Click her			
	Г		bitat for:	The second secon			
		-	Federally Listed spe	cies. Explain findings: C	lick here to enter text.		
			Fish/spawn areas. Ex	xplain findings: Click here	to enter text.		
		П	Other environmental	lly-sensitive species. Exp	lain findings: <i>Click here to enter te</i>	ext. 1801 11	
			Aquatic/wildlife div	ersity. Explain findings:	Click here to enter text.		
Ch	ua at	ouisti	on of all wetlands ad	is sout to the tulbutance	:f a/		
CII				jacent to the tributary (ed in the cumulative analy			
				al are being considered in			
	For	each	wetland, specify the f	following:	# 1 = 1 = 2 = 2 = 2 = 3 = 4 = 4 = 4 = 4 = 4 = 4 = 4 = 4 = 4		
		Dire	ectly 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	##	
			VAI	ш	TEXAL		

Summarize overall biological, chemical and physical functions being performed: Click here to enter text.

3.

2.

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: Click here to enter text.
- 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: Click here to enter text.
- 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:
 Click here to enter text.

D,	DETERMINATIONS OF JURISDICTIONAL FINDINGS. T	HE 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: Click here to enter 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: Click he to enter 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: Click here to enter 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: Click here to enter 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.

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	. П	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: Click here to enter text.
	П	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: Click here to enter text.
	Pro	vide acreage estimates for jurisdictional wetlands in the review area: # acres.
5.	We adja	Is adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. It alongs that do not directly abut an RPW, but when considered in combination with the tributary to which they are accent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data porting this conclusion is provided at Section III.C.
	Provide a	acreage estimates for jurisdictional wetlands in the review area: # acres.
6.	Wes	s adjacent to non-RPWs that flow directly or indirectly into TNWs. tlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting conclusion is provided at Section III.C.
	Provide 6	estimates for jurisdictional wetlands in the review area: # acres.
7.	As a general Den	dments of jurisdictional waters. eral rule, the impoundment of a jurisdictional tributary remains jurisdictional. nonstrate that impoundment was created from "waters of the U.S.," or nonstrate that water meets the criteria for one of the categories presented above (1-6), or nonstrate that water is isolated with a nexus to commerce (see E below).
OR AL	DESTRU L THAT A	
		e or could be used by interstate or foreign travelers for recreational or other purposes. ch fish or shellfish are or could be taken and sold in interstate or foreign commerce.
		e or could be used for industrial purposes by industries in interstate commerce.
П		isolated waters. Explain: Click here to enter text.
F	Other fac	tors. Explain: Click here to enter text.
Idei	itify wate	r body and summarize rationale supporting determination: Click here to enter text.
Pro	vide estima	ates for jurisdictional waters in the review area (check all that apply):
		waters: # linear feet # width (ft).
		n-wetland waters: # acres.
-		ify type(s) of waters: Click here to enter text.
1	Wetlands	; # acres.
	₩ If pote	RISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): ential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements.
Γ		w 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).
Γ	Water	s do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Click here to enter text.
1	Other	: (explain, if not covered above): Click here to enter text.
(i.e.		ge estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment apply):
Γ	Non-wetl	and waters (i.e., rivers, streams): # linear feet # width (ft).
Γ	Lakes/po	nds: # acres.
	Other nor	n-wetland waters: # acres. List type of aquatic resource: Click here to enter text
	Wetlands	: # acres.

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E.

F.

	rovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, when ding is required for jurisdiction (check all that apply):	ere such a
_	Non-wetland waters (i.e., rivers, streams): # linear feet # width (ft).	
r-	Lakes/ponds: # acres.	
į.	Other non-wetland waters: # acres. List type of aquatic resource: Click here to enter text.	
,		
1	Wetlands: # acres.	
SECTIO	ION IV: DATA SOURCES.	
requ	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where causted, appropriately reference sources below): 71 Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Vicinity Map by Corps	checked and
14.1	Data sheets prepared/submitted by or on behalf of the applicant/consultant.	
1 1	Office concurs with data sheets/delineation report.	
	Office does not concur with data sheets/delineation report.	
r		
1 1	USGS NHD data.	
	USGS 8 and 12 digit HUC maps.	
r1	Alaska District's Approved List of Navigable Waters	
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B. ADD	DITIONAL COMMENTS TO SUPPORT JD: Click here to enter text.	
1		
Ame	December 4, 2015	
Ama	nanda L. Whittier Date	
Proje	niect Manager	

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