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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 16-Oct-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2012-00599-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

 State :
 AK - Alaska

 County/parish/borough:
 Anchorage

 City:
 Eagle River

 Lat:
 61.41777

 Long:
 -149.43233

 Universal Transverse Mercator
 Folder UTM List

UTM list determined by folder location

• NAD83 / UTM zone 6N

Waters UTM List

UTM list determined by waters location

• NAD83 / UTM zone 6N

Name of nearest waterbody: Peters Creek
Name of nearest Traditional Navigable Water (TNW): Knik Arm

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: 16-Oct-2012✓ Field Determination Date(s): 28-Aug-2012

SECTION II: SUMMARY OF FINDINGS

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.

Maters 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:1

Water Name	Water Type(s) Present	
POA-2012-599; Peters Creek	Isolated (interstate or intrastate) waters, including isolated wetlands	

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

Area: (m²) Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: 1987 Delineation Manual.

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:3

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Adjacency was evaluated through the connection of this wetland to Peters Creek through a ravine located northwest from the wetland and which appears to contain a spatially intermittent stream. My initial determination was that these wetlands were adjacent to Peters Creek because there was an unbroken shallow subsurface flow between the site and the stream. Based on later informal consultations with Heather Dean, EPA Region 10 (email exchanges from September 26, 2012, through October 1, 2012, in file) and more detail analysis of contour lines (see file) and flow pattern information provided by VEI surveyor, Mr. Aaron Jarnigan (see file), I concluded that:

- 1. Water flow accumulates at the wetland's north-end in close proximity to Mirror Drive.
- 2.Flows from this wetland rarely crosses Mirror Drive. When that is the case, flows go through a 15-inch CMP (corrugated metal pipe), which is higher on the south side.
- 3. This culvert discharges to a small basin located on the north side of Mirror Drive. This small basin, not only captures infrequent wetland overflows, but also flows coming from other surronding areas. The small basin and an immediate adjacent 15-inch CMP that crosses Lot 5 driveway (apartment complex) constitute the lowest points in the area and draw water from the vicinity as depicted by the arrows shown in file. 4. Flows on the north east side of Mirror Drive moves westerly to the same lowest point, where water flows then seep or infiltrate into the ground. 5. Water only reach a 24-inch CMP located on the Old Glenn Highway north from Mirror Drive when extremely high flows caused by spring breakups or heavy rainy events are capable to create a sheetflow through the apartment building complex parking lot. 6. Rarely this sheetflow is such that it reaches the 24-inch CMP under the Old Glenn Highway.
- 7. Assuming that water flows are such they could reach the east side of the Old Glenn Hwy by crossing the 24-inch CMP, water could eventually cross a 36-inch CMP located at the intersection of Sampson Drive and the Old Glenn Hwy and reach a confined topographic relic or channel created by late glacial metlwater (see file). This glacial channel goes from Whispering Birch and Muley to the corner of Glacier Vista and Knik Vista and collects flows from adjacent higher areas, discharging into Peters Creek floodplain.



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:

Drainage area:

Average annual rainfall: inches Average annual snowfall: 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 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.

Explain:

Identify flow route to TNW:5

Tributary Stream Order, if known:

Not Applicable.

(b) General Tributary Characteristics:
Tributary is: Not Applicable.
Tributary properties with respect to top of bank (estimate): Not Applicable.
Primary tributary substrate composition: Not Applicable.
Tributary (conditions, stability, presence, geometry, gradient): Not Applicable.
(c) Flow: Not Applicable.
Surface Flow is: Not Applicable.
Subsurface Flow: Not Applicable.
Tributary has: Not Applicable.
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, etc.). Not Applicable.
(iv) Biological Characteristics. Channel supports: Not Applicable.
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.

Significant Nexus: Not Applicable

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:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:8

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:9

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: 10

Waters Name	Interstate\Foreign Travelers	Fish/Shellfish Commerce	Industrial Commerce	Interstate Isolated	Explain	Other Factors	Explain
POA-2012-599; Peters Creek	×	-	-	-	-	-	-

Identify water body and summarize rationale supporting determination:

Water Name	Adjacent To TNW Rationale	TNW Rationale
POA-2012-599; Peters Creek	-	-

Provide estimates for jurisdictional waters in the review area:

Water Name	Туре	Size (Linear) (m)	Size (Area) (m²)
POA-2012-599; Peters Creek	Isolated (interstate or intrastate) waters, including isolated wetlands	-	3884.98176
Total:		0	3884.98176

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:
- Frior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):
- Maters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):
- -An unbroken surface or shallow subsurface connectivity could not be established due to, in part, the building pad constructed for the apartment building complex. This building pad constricts and interrupts the surface and shallow subsurface flow connection to down gradient jurisdictional waters, which most likely existed before urban development in the area.
- -Furthermore, there are approximately 2.2 miles from the site to Peters Creek, along the presumed flow path as depicted in attachment 6. Even with the high conductivity associated with the Kashwitna-Kichatna soils (i.e., 68.2595 micrometers/second) and assuming that shallow subsurface flows would pass the constriction created by the apartment complex building pad, it would take approximately 19 months for water to get from the wetland to Peters Creek.
- -Therefore, the wetlands in question are not in enough proximity to the jurisdictional waters (Peters Creek) to sufficiently support a reasonable inference of continued shallow subsurface flow or ecological connection between them.
- Based on the information presented above, I conclude that although there are wetlands on parcel 051-062-40-00, they are not adjacent to either TNWs or their tributaries because the three criteria (1.Unbroken surface or shallow subsurface hydrologic connection between the wetlands and the traditional navigable water or relatively permanent tributary, 2. Physical separation of the wetlands from such waters by a berm, dike or similar feature, or 3. Proximity sufficient to support a reasonable inference of ecological connection between the wetlands and the other water body) for connectivity is met. Therefore, the Corps does not have jurisdicition.

Other ((Ехр	lain)):
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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:

Water Name	Туре	Size (Linear) (m)	Size (Area) (m²)
POA-2012-599; Peters Creek	Isolated (interstate or intrastate) waters, including isolated wetlands	-	3884.98176
Total:		0	3884.98176

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

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Total:	-	0	3884.98176
POA-2012-599; Peters Creek	Isolated (interstate or intrastate) waters, including isolated wetlands	-	3884.98176
Water Name	Туре	Size (Linear) (m)	Size (Area) (m²)

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	VEI Consultants topographic maps with data on water flow patterns.	-
Data sheets prepared by the Corps	Corps collected 4 sampling plots on wetland site.	-
U.S. Geological Survey map(s).	-	-
USDA Natural Resources Conservation Service Soil Survey.	Soil Survey of the Anchorage Area	-
State/Local wetland inventory map(s):	Eagle River Wetland Atlas, 2008	-
Photographs	-	-
Aerial	BDL WMS	-
Aerial	LIDAR maps provided by the Municipality of Anchorage.	-
Other	Wetland sampling plots' photos.	-
Other information	Isolated Call Summary Sheet for Corps/EPA Coordiantion in file.	-
Other information	MOA Watershed Services Hydrology Statements	-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

https://orm.usace.army.mil/orm2/f?p=106:34:638375152731451::NO::

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

²-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

 $^{^{3}\}text{-Supporting}$ documentation is presented in Section III.F.

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

⁵-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.

⁶⁻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.

⁸-See Footnote #3.

 $^{^{9}}$ -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰⁻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.