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): August 16, 2019

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Alaska District, POA-2019-00492

| | AND BACKGROUND INFORMATION: |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | Borough: n/a City: Valdez long in degree decimal format): Lat. 61.1172° N., Long. 146.2471°W. |
| Universal Transverse Mercato | |
| Name of nearest waterbody: P | |
| , | avigable Water (TNW) into which the aquatic resource flows: Port Valdez |
| | ogic Unit Code (HUC): 190202010805; Valdez Glacier Stream |
| ⊠Check if map/diagram of re | view area and/or potential jurisdictional areas is/are available upon request. |
| □Check if other sites (e.g., of different JD form | fsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a |
| D. REVIEW PERFORMEI | FOR SITE EVALUATION (CHECK ALL THAT APPLY): |
| ☐Office (Desk) Determinatio | n. Date: |
| ⊠Field Determination. | Date(s): August 6, 2019 |
| SECTION II: SUMMARY | OF FINDINGS |
| | ERMINATION OF JURISDICTION. |
| | rs of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) |
| in the review area. [Required] | |
| | o the ebb and flow of the tide. |
| ☐ Waters are prese foreign commer | ently used, or have been used in the past, or may be susceptible for use to transport interstate or ee. Explain: |
| B. CWA SECTION 404 DE | TERMINATION OF JURISDICTION. |
| There are "waters of the U.S." [Required] | 'within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. |
| 1. Waters of the U | |
| - | nce of waters of U.S. in review area (check all that apply):1 |
| ☐TNWs, including | |
| □Wetlands adjacen | |
| • • | nent waters ² (RPWs) that flow directly or indirectly into TNWs |
| | low directly or indirectly into TNWs |
| • | abutting RPWs that flow directly or indirectly into TNWs |
| _ | t to but not directly abutting RPWs that flow directly or indirectly into TNWs |
| | t to non-RPWs that flow directly or indirectly into TNWs |
| ☐Impoundments of | jurisdictional waters |
| ☐ Isolated (interstat | e or intrastate) waters, including isolated wetlands |
| | |

 $^{^{1}}$ 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 months.

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

Non-wetland waters: 2.69 acres (PUBHx).

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Established by the OHWM of the pond – estimated by aerial imagery (2019)

Elevation of established OHWM (if known): unknown

2. Non-regulated waters/wetlands (check if applicable):³

□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 (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 waterbody⁴ 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

³ 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.

| (i) | General Area Conditions: | | | |
|------|---------------------------------------------------------------------------------|--|--|--|
| | Watershed size: Drainage area: | | | |
| | Diamage area. | | | |
| | Average annual rainfall: inches | | | |
| | Average annual snowfall: inches | | | |
| (ii) | | | | |
| | (a) Relationship with TNW: | | | |
| | ☐ Tributary flows directly into TNW. | | | |
| | ☐ Tributary flows through tributaries before entering TNW. | | | |
| | 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: | | | |
| | (b) General Tributary Characteristics (check all that apply): | | | |
| | Tributary is: | | | |
| | ☐Artificial (man-made). Explain: | | | |
| | ☐Manipulated (man-altered). Explain: | | | |
| | | | | |
| | Tributary properties with respect to top of bank (estimate): | | | |
| | Average width: feet Average depth: feet | | | |
| | Average acptil. Teet Average side slopes: Choose an item. | | | |
| | Average side stopes. Choose all telli. | | | |
| | Primary tributary substrate composition (check all that apply): | | | |
| | ☐Silts ☐Sands ☐Concrete | | | |
| | \Box Cobbles \Box Gravel \Box Muck | | | |
| | ☐Bedrock ☐Vegetation. Type/% cover: | | | |
| | □Other. Explain: | | | |
| | Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: | | | |
| | Presence of run/riffle/pool complexes. Explain: | | | |
| | Tributary geometry: | | | |
| | Tributary gradient (approximate average slope): % | | | |
| | (c) Flow: | | | |
| | Tributary provides for: | | | |
| | 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: | | | |
| | Tributary has (check all that apply): | | | |
| | ☐Bed and banks | | | |

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.

| \square OHWM ⁶ (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 |
| □shelving | ☐the presence of wrack line |
| □vegetation matted down, bent, or absent | - |
| □leaf litter disturbed or washed away | □scour |
| □ sediment deposition | ☐multiple observed or predicted flow events |
| □ water staining | □ abrupt change in plant community |
| □other (list): | Euorupt change in plant community |
| □Discontinuous OHWM. ⁷ Explain: | |
| □Discontinuous Off w W. Expiani. | |
| If factors other than the OHWM were used to determine apply): | ine lateral extent of CWA jurisdiction (check all that |
| ☐ 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 | 8 8 8 71 |
| □other (list): | |
| | |
| Characterize tributary (e.g., water color is clear, discolored, oily characteristics, etc.). Explain: Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that | at apply): |
| Characteristics of wetlands adjacent to non-TNW that flow dire | ectly or indirectly into TNW |
| (i) Physical Characteristics: | |
| (a) General Wetland Characteristics: | |
| Properties: | |
| Wetland size: acres Wetland type. Explain: | |
| Wetland quality. Explain: | |
| Project wetlands cross or serve as state boundaries. Explain: | |
| 1 Toject wettailes cross of serve as state boundaries. Explain. | • |
| (b) General Flow Relationship with Non-TNW: | |
| Flow is: Explain: | |
| Surface flow is: | |
| Characteristics: | |
| Subsurface flow: Explain findings: | |
| \Box Dye (or other) test performed: | |
| | |

2.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily server 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.

⁷ Ibid.

| | Determination with No | n-TNW: | |
|----------------------------|----------------------------|--------------------------------------|------------------------------------|
| ☐ Directly abutting | | | |
| □Not directly abut | · · | P. 1. | |
| | nd hydrologic connection | n. Explain: | |
| | nnection. Explain: | | |
| ☐ Separated by b | erm/barrier. Explain: | | |
| (d) Proximity (Relation | ship) to TNW | | |
| Project wetlands are | e river miles | from TNW. | |
| Project waters are | aerial (stra | ight) miles from TNW. | |
| Flow is from: | | | |
| Estimate approxima | ate location of wetland as | s within the floodplain. | |
| (ii) Chemical Characteris | stics: | | |
| | | s clear, brown, oil film on surface; | ; water quality; general watershed |
| characteristics; etc.). E | | | |
| Identify specific polluta | ants, if known: | | |
| (***) District Character | :-4: W-41 J | 4. (ah aala all 4h a4 ammla). | |
| (iii) Biological Character | ristics. Wetland suppor | | |
| □Vegetation type/perc | | se widin). | |
| ☐ Habitat for: | ent cover. Explain. | | |
| | ed species. Explain findi | ngs: | |
| • | eas. Explain findings: | 1150. | |
| • | nentally-sensitive specie | e Evnlain findinge: | |
| | fe diversity. Explain find | - | |
| □Aquatic/ witdii | ic diversity. Explain init | unigs. | |
| Characteristics of all wet | lands adjacent to the tr | ibutary (if any) | |
| All wetland(s) being con | | | |
| Approximately () acres | in total are being conside | ered in the cumulative analysis. | |
| | | | |
| For each wetland, specif | y the following: | | |
| Directly 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 | # |

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

Y/N

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.

Y/N

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:

3.

- 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:
- 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:

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: The RPW consists of a 2.69-acre pond which has a perennial groundwater |
| | discharge that flows through a series of culverts and ditches that convey flow under the Richardson Highway into a |
| | forested surface tributary system, and directly into Port Valdez, a TNW. A site visit was conducted on August 6, |
| | 2019. On average, Valdez receives around 70 inches of rain per year, with August being one of the wetter summer |
| | months (http://www.worldclimate.com/climate/us/alaska/valdez). The last day before the site visit with recorded |
| | measureable rain was July 28 (https://w2.weather.gov/climate/xmacis.php?wfo=pafc). On average, from January |
| | through July, Valdez receives 32.36 inches of precipitation (average calculated from NOAA data beginning in 2012). |
| | In 2019, during these months, only 19.21 inches of precipitation was recorded, 13.15 inches below the average |
| | (https://w2.weather.gov/climate/xmacis.php?wfo=pafc). At the time of the site visit, precipitation conditions were not |
| | typical; conditions were much drier than normal. Taking into consideration the dry conditions with the amount of |
| | water present at the pond, and flowing out of the pond to Port Valdez at the time of the site visit, it lends evidence that |
| | the flow is year-round. Additionally, water is visibly present at the pond and in the roadside conveyance and surface |
| | tributary system in which water was seen flowing during the site visit in aerial photography taken at various times of |
| | any given year. Anadromous fish were present in the surface water flowing from the forested area to Port Valdez. |
| | The support of anadromous fish and the visible presence of water in aerial photography also lends evidence that the |
| | pond and its tributary system flows year-round. Both the City of Valdez and a long-term Valdez resident mentioned |
| | to the Corps that the pond is ground water fed, which would make the pond a headwater of the connected tributary |
| | system south of it to Port Valdez. |
| | ☐ 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):

| ☑Other non-wetland waters: 2.69 acres. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identify type(s) of waters: Pond (PUBHx) |
| Non-RPWs ⁸ 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 TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C. |
| rovide 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: |
| 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 rational 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. |
| 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. |
| Provide acreage estimates for jurisdictional wetlands in the review area: acres. |
| 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. |
| mpoundments of jurisdictional waters. ⁹ 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). |
| LATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, ADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING UCH WATERS (CHECK ALL THAT APPLY): ¹⁰ |
| h are or could be used by interstate or foreign travelers for recreational or other purposes. which fish or shellfish are or could be taken and sold in interstate or foreign commerce. |
| |

⁸ See Footnote #3.

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

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 Jurisdiction Following Rapanos.

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| d, |
| n g |

| \Box State/Local wetland inventory map(s): | |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| □FEMA/FIRM maps: | |
| □ 100-year Floodplain Elevation is: (National Geodectic Vertical Datus | m of 1929) |
| ⊠Photographs: ⊠Aerial (Name & Date): GoogleEarth – 6/25/19; Dig | gital Globe – 2018 & 2019 |
| or \square Other (Name & Date): Site Photos $-8/6/19$ | |
| □ Previous determination(s). File no. and date of response letter: | |
| ☐ Applicable/supporting case law: | |
| ☐ Applicable/supporting scientific literature: | |
| ⊠Other information (please specify): Flow information through forested with Mr. James Williams, Valdez resident. | d area (Old Valdez) information from conversations |
| B. ADDITIONAL COMMENTS TO SUPPORT JD: n/a | |
| Roberta K Budnik | 08/19/2019 |
| Roberta K. Budnik | Date |
| Project Manager | |

South Section