

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): 7/20/2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Omaha District, Nebraska Field Office, Lancaster/Saunders Counties Agnew North and South STPD-BR-79-2(108) CN 10584A, NWO-2014-00512-WEH

C. PROJECT LOCATION AND BACKGROUND INFORMATION: This form covers an unnamed tributary (non-RPW channel S73) and abutting/adjacent wetlands (Wetlands U and V) that are adjacent to and discharge into North Oak Creek (RPW).

State: **Nebraska** County/parish/borough: **Lancaster** City: **Valparaiso**
Center coordinates of site (lat/long in degree decimal format): Lat. **41.002589° N**, Long. **-96.802623° W**.
Universal Transverse Mercator: **14**

Name of nearest waterbody: **unnamed tributary to North Oak Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Salt Creek**

Name of watershed or Hydrologic Unit Code (HUC): **Salt 10200203**

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 this action and are recorded on a different JD form. **North Oak Creek (RPW) and other tributaries are documented on a different form.**

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: **February 24, 2015**

Field Determination. Date(s): **May 8, 2014; June 4, 2014; September 11, 2014**

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: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "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
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands 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
- Impoundments of jurisdictional waters
- 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: **4,000** linear feet: **6** width (ft) and/or acres.

Wetlands: **~1.34** acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): .

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: .

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).

³ Supporting documentation is presented in Section III.F.

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

(i) General Area Conditions:

Watershed size: 29,454 acres HUC12 - 102002030404

Drainage area: 0.5 square miles

Average annual rainfall: 29.91 inches

Average annual snowfall: 28.3 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: A manipulated natural unnamed tributary (non-RPW channel S73) flows southeast alongside the railroad then east through the review area for approximately 130 feet under Highway 79 discharging into North Oak Creek (RPW) which flows for approximately 6.5 miles and discharges into Oak Creek (RPW) which flows for approximately 20 miles and discharges into Salt Creek (TNW).

Tributary stream order, if known:.

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural

Artificial (man-made). Explain: .

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.

Manipulated (man-altered). Explain: This unnamed tributary is a manipulated natural drainage with abutting/adjacent wetlands. This tributary has been channelized through wetlands, agricultural land and along the railroad right-of-way.

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

Average width: 6 feet
Average depth: 1 feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover: **Typha / 25% cover, but varies through feature.**
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **The tributary has been channelized, excavated and manipulated through wetlands, agricultural fields and along the railroad right-of-way. The tributary has moderately vegetated bed and banks in some areas, deposition in some areas and unvegetated bed in other areas where erosion and degradation is scouring out through wetlands between the railroad and the highway.**

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): unknown %

(c) Flow:

Tributary provides for: **Intermittent but not seasonal flow**

Estimate average number of flow events in review area/year: **11-20**

Describe flow regime: **The S73 tributary is a manipulated natural drainage with abutting/adjacent wetlands. The drainage flows through agricultural fields and along the southwest side the railroad tracks. The tributaries carry flows which include contaminants from agricultural and rural highway stormwater run-off. Contaminants include herbicides, pesticides, insecticides, fertilizers, salts, oils, sediment, etc. The majority of the land use in this rural watershed consists of row crop agriculture, rangeland and pasture. The Corps visited this site on May 8, June 4, and September 11, 2014. During the site visits, surface water and indicators of OHWM were present, such as: a clear, natural line impressed on the bank, debris/wrack line, absent, matted and bent vegetation, and scour. Flow was observed during the May 8, June 4, and September 11, 2014 site visits. The following data sources show the drainage to be an intermittent stream: U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), USGS Topographic Quad Maps, Geographic Data Technology (GDT) Hydrography Feature Code, and U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Maps for Lancaster County.**

Other information on duration and volume: **Actual precipitation data for the Village of Valparaiso in the month of May 2014 was 5.26 inches; the normal average for May is 4.29 inches. Actual precipitation data for the Village of Valparaiso in the month of June 2014 was 5.9 inches; the normal average for June is 4.35 inches. Actual precipitation data for the Village of Valparaiso in the month of September 2014 was 6.89 inches; the normal average for September is 3.02 inches.**

Surface flow is: **Confined.** Characteristics: **Stream morphology is such that most flows will stay within the existing banks of the manipulated tributaries and only leave the channel during extremely high flows.**

Subsurface flow: **Unknown.** Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (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 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.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

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):

⁶A 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.

⁷Ibid.

(iii) **Chemical Characteristics:**

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

Explain: The non-RPW is a manipulated natural drainage with abutting/adjacent wetlands. During the May and September 2014 site visits, the water was relatively clear, during the June 2014 site visit after heavy rainfall, the water was turbid and brown. The tributaries carry flow which include contaminants from agricultural fields and paved highway stormwater run-off. Contaminants include herbicides, pesticides, insecticides, fertilizers, salts, oils, sediment, etc. The majority of the land use in this rural watershed consists of row crop agriculture with rangeland and pasture.

Identify specific pollutants, if known: Herbicides, pesticides, insecticides, fertilizers, agricultural run-off, salts, oils, sediment,

etc.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

Riparian corridor. Characteristics (type, average width):

Wetland fringe. Characteristics: PEMA/C wetlands are abutting/adjacent to the manipulated non-RPW drainage.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: Typically, wetlands in the area are known to support habitat for small mammals, birds, insects, reptiles and amphibians. Specifically, redwing blackbirds and sparrows were observed, as well as, anurans (bullfrogs and chorus frogs) were observed and heard calling within the review area during the May 2014 and June 2014 site visits.

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: 1.34 acres

Wetland type. Explain: PEMA/C.

Wetland quality. Explain: Low/Medium. The wetlands are dominated by OBL, FACW and FAC species. The Wetland Delineation Data Form (date August 27, 2013) included in the request provided by the consultant identifies the area as wetlands with Phalaris arundinacea, Typha latifolia, Spartina pectinata, Polygonum coccineum and Helianthus grosseserratus as the dominant species present. These low/medium quality wetlands in this watershed are typical for highly manipulated/disturbed areas within rural agricultural settings where wetlands have previously been removed, manipulated, or are currently being farmed through. The wetlands that remain in this watershed, regardless of quality, provide important water quality benefits to the watershed, including filtration of pollutants and sediment trapping.

Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: The wetlands and tributary are located within and adjacent to agricultural fields. The confluence of the tributary, and its abutting wetlands, to the North Oak Creek (RPW) is approximately 100 feet east from the project area. Precipitation events and run-off in the agricultural fields introduce pesticides, herbicides, fertilizers, and sediment as pollutants to the wetlands and tributary. The wetlands associated with the non-RPW filter pollutants and sediment before they are discharged downstream into the RPW and TNW. The majority of the land use in this rural watershed consists of row crop agriculture with rangeland and pasture. During the May, June and September 2014 site visits, flow was observed, with matted vegetation and scour.

Surface flow is: **Confined**

Characteristics: Located within the excavated and manipulated drainage.

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: (Wetland U directly abuts non-RPW S73.) A continuous hydrologic connection exists between the non-RPW and wetland V where a headcut into wetland U connects the two wetlands (See photos # 19 -23 from June 2014 Site Visit). Wetland V is located in a wider than normal ditch located in USDA/NRCS-mapped hydric soils that concentrates hydrology between the railroad and highway. Flow was observed on June 4, 2014 from Wetland V into Wetland U and the non-RPW. The flow observations and the headcut scour within the wetlands provides evidence that water flows through the wetlands into the non-RPW during and after precipitation events, confirming a hydrologic connection to the non-RPW and the immediate downstream RPW, North Oak Creek.

Ecological connection. Explain:

Separated by berm/barrier. Explain: Wetland V is separated from directly abutting non-RPW S73 by the headcut/scour creating a barrier.

(d) Proximity (Relationship) to TNW

Project wetlands are **25-30** river miles from TNW.

Project waters are **10-15** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: **The wetlands are located within close proximity to agricultural fields. Precipitation events and run-off in the agricultural fields introduce pesticides, herbicides, fertilizers, and sediment as pollutants to the wetlands and tributaries. Water color is relatively clear, however, during the June 2014 site visits after heavy rainfall, the surface water was turbid and brown within the wetlands. The wetlands filter pollutants and sediment before they are discharged downstream into the RPW and TNW. The majority of the land use in this rural watershed consists of row crop agriculture with rangeland and pasture.**

Identify specific pollutants, if known: **Herbicides, pesticides, insecticides, fertilizers, agricultural run-off, salts, oils, sediment, etc.**

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width): .
- Vegetation type/percent cover. Explain: **The wetlands are 90 to 100% vegetated and are dominated by OBL, FACW, FAC species. The Wetland Delineation Data Forms (dates August 26, 2013) included in the request provided by the applicant's consultant identifies the area as a wetland with Phalaris arundinacea, Typha latifolia, Spartina pectinata, Polygonum coccineum and Helianthus grosseserratus as the dominant species present.**

Habitat for:

- Federally Listed species. Explain findings: .
- Fish/spawn areas. Explain findings: .
- Other environmentally-sensitive species. Explain findings: .
- Aquatic/wildlife diversity. Explain findings: **Typically, wetlands in the area are known to support habitat for small mammals, birds, insects, reptiles and amphibians. Specifically, redwing blackbirds and sparrows were observed, as well as, anurans (bullfrogs and chorus frogs) were observed and heard calling within the review area during the May 2014 and June 2014 site visits..**

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

All wetland(s) being considered in the cumulative analysis: **2**

Approximately (**1.34**) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland U - Yes	~ 0.0431 acres		
Wetland V - No	~ 1.2992 acres		

Summarize overall biological, chemical and physical functions being performed: **The abutting wetlands provide a water filtration function to the non-RPW, downstream RPW and TNW. The abutting wetlands may provide habitat, food, and refuge for wildlife and aquatic life including small mammals, reptiles, amphibians, insects, thereby enhancing the biological integrity of the downstream TNW. The abutting wetlands contribute to downstream water quality by capturing sediment and pollutants. The abutting wetlands have the capacity to transport and reduce the amount of pollutants and sediment to the downstream TNW, which ultimately effects the biological integrity of the TNW and the species that use it. Although these wetlands are not of high quality, they are typical for a highly manipulated/disturbed area within a rural agricultural setting where wetlands have been removed, manipulated or are being farmed through, however, the wetlands still provide important water quality benefits to the area as described above.**

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:
- 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: **The non-RPW S73 channel is a manipulated natural drainage, with abutting/adjacent wetlands, that flows directly into an RPW at the Highway 79 culvert outlet . The non-RPW carries flows which include contaminants from agricultural and paved highway stormwater run-off. Contaminants include herbicides, pesticides, insecticides, fertilizers, salts, oils, sediment, etc. The majority of the land use in this rural watershed consists of row crop agriculture with rangeland and pasture. The wetlands are dominated by OBL, FACW, and FAC species. The non-RPW has a continuous connection and discharges directly into the downstream RPW (North Oak Creek). The tributary and abutting/adjacent wetlands provide a water filtration function to the downstream RPW and TNW. The tributary and abutting/adjacent wetlands provide habitat, food, and refuge for wildlife and aquatic life including amphibians (such as the chorus frogs and bullfrogs that were observed and heard during the May and June 2014 site visits), thereby enhancing the biological integrity of the downstream TNW. The drainage and abutting/adjacent wetlands contribute to downstream water quality by capturing sediment and pollutants. In conclusion, this non-RPW and abutting/adjacent wetlands have the capacity to transport and reduce the amount of pollutants and sediment to the downstream TNW, which ultimately affects the biological integrity of the TNW and the species that use it, thereby demonstrating a significant nexus exist from the non-RPW S73 and abutting/adjacent wetlands to the downstream TNW.**
- 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: **The wetland U and V described in Section C.2 above are also considered wetlands adjacent to North Oak Creek, which is an RPW, as these wetlands are located approximately 100 feet west of the North Oak Creek, and the non-RPW S73 provides the hydrologic connection for Wetlands U and V to the RPW. The wetlands provide a water filtration function to the downstream RPW and TNW. The wetlands provide in-stream habitat, food, and refuge for wildlife and aquatic life including small mammals, reptiles, amphibians, insects, and plants, thereby enhancing the biological integrity of the downstream TNW. The wetlands contribute to downstream water quality by capturing sediment and pollutants. Wetlands U and V provide all of the functions mentioned above for the non-RPW and the RPW (North Oak Creek) and ultimately the downstream TNW. In conclusion, the adjacent wetlands U and V in close proximity to North Oak Creek have the capacity to transport and reduce the amount of pollutants and sediment to the downstream TNW, which ultimately effects the biological integrity of the TNW and the species that use it, thereby demonstrating a significant nexus between the adjacent Wetlands U and V to the downstream TNW.**

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:
 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-RPWs⁸ 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: **4,000** linear feet **6** 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 rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

⁸See Footnote # 3.

- 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.34** 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: **1.34** acres.

7. Impoundments 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).

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 (CHECK ALL THAT APPLY):¹⁰

- 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: .
 Other factors. Explain: .

Identify water body and summarize rationale supporting determination:

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: .
 Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- 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 (check all that apply):

- 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 (check all that apply):

- 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.

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.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- 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.
 - Office does not concur with data sheets/delineation report. **The consultant's delineation map does not show the full extent of the non-RPW S-73 beyond the "study area", upstream and downstream.**
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas: [Salt 10200203](#).
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: [Valparaiso - 1:24,000](#).
- USDA Natural Resources Conservation Service Soil Survey. Citation: [Lancaster County](#).
- National wetlands inventory map(s). Cite name: [Valparaiso - 1:24,000](#).
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: [FEMA Region VII FIRM Map](#).
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): [ArcGIS - Valparaiso 199x B&W Ortho & 2012 USDA Color Ortho](#).
or Other (Name & Date): [Google Earth Pro - Valparaiso 1994, 1999, 2002, 2003, 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013](#).
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): [Photographs and Wetland Delineation submitted by applicant/agent. Site Visits were conducted by USACE on May 8, 2014, June 4, 2014 and September 11, 2014. AccuWeather and NOAA precipitation data.](#)

B. ADDITIONAL COMMENTS TO SUPPORT JD:

May 8, 2014 Site Visit.

Rainfall recorded for Valparaiso, NE

6 May: no rainfall

7 May: 0.30 inches of rainfall

8 May: 0.02 inches of rainfall

May 2014 Average: 5.26 inches of rainfall

Normal May Average: 4.29 inches of rainfall

June 4, 2014 Site Visit.

Rainfall recorded for Valparaiso, NE

2 June: no rainfall

3 June: 1.41 inches of rainfall

4 June: 0.13 inches of rainfall

June 2014 Average: 5.9 inches of rainfall

Normal June Average: 4.35 inches of rainfall

September 11, 2014 Site Visit.

Rainfall recorded for Valparaiso, NE

9 Sep.: 2.49 inches of rainfall

10 Sep.: no rainfall

11 Sep.: 0.10 inches of rainfall

September 2014 Average: 6.89 inches of rainfall

Normal September Average: 3.02 inches of rainfall

Although the rainfall that occurred during the months of the Corps' site visits were above average, this provided for observed flow events that confirmed the continuous hydrologic connection between the delineated wetlands and the non-RPW and RPW. The channel features, wetlands and surface water are evident on several years of aerial photos (including 1994, 1999, 2002, 2004, 2005, 2007, 2009, 2010, 2011 and 2012). See attached maps that have been provided with this JD. The USDA Soil Survey shows that all delineated wetlands and the non-RPW are located in NRCS-listed hydric soils for Lancaster County, Nebraska (map unit symbol 7231 and 7644, both with hydric rating 1% and hydric criteria 2B3 and 4).

Both Wetlands U and V and the non-RPW S73 are located within the North Oak Creek floodplain. The FEMA map shows that the non-RPW and Wetlands U and V are located within the "High Risk Area" (Flood Zone A) for North Oak Creek.

Wetland U directly abuts the non-RPW S73 and is adjacent to the RPW (North Oak Creek). Wetland V is adjacent to both the non-RPW and the RPW (North Oak Creek). A continuous surface hydrologic connection exists between the non-RPW and wetland V where a headcut scour into the wetlands functions as a drop in grade to differentiate the two wetlands (See photos #19-22 from June 2014 site visit). Wetland V is a large wetland located in a wider than normal ditch that concentrates hydrology between the railroad and highway and flows into Wetland U and the non-RPW S73. Flow was observed on June 4, 2014 from Wetland V into Wetland U and the non-RPW. The flow observations and

large headcut scour within the wetlands provides evidence that water flows through the wetlands and into the non-RPW during and after precipitation events, indicating that these wetlands are hydrologically connected to the non-RPW (S73) and RPW.

Attachments: ArcGIS Map (with NHD and NWI) and Consultant Delineation Maps with USACE added comments.