## 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): 28 May 2012

## B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Omaha District, Countryside and Woodlawn Estates, NWO-2011-02320-WEH

C.	PROJECT LOCATION AND BACKGROUND INFORMATION:  State: Nebraska County/parish/borough: Lancaster City: Lincoln  Center coordinates of site (lat/long in degree decimal format): Lat. 40.840226398° N, Long96.717023836° W.  Universal Transverse Mercator: 14  Name of nearest waterbody: 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.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  ☐ Office (Desk) Determination. Date: 29 May 2012  ☐ Field Determination. Date(s): 19 April, 20 April, 10 May, 2012
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew 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.
The	ere 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):  TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters <sup>2</sup> (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 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
	<ul> <li>b. Identify (estimate) size of waters of the U.S. in the review area:         Non-wetland waters: 2,500 linear feet: width (ft) and/or acres.     </li> <li>Wetlands: acres.</li> </ul>
	<b>c.</b> Limits (boundaries) of jurisdiction based on: Established by OHWM.  Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): <sup>3</sup> Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

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<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> 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).

<sup>3</sup> 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.	TN	W

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 waterbody <sup>4</sup> 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: 41,805 acres
Drainage area: 200 acres

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 2 tributaries before entering TNW.

Project waters are 1-2 river miles from TNW.

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

Project waters are 1 (or less) 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 TNW<sup>5</sup>: Un-named tributary to Oak Creek to Salt Creek, a TNW.

Tributary stream order, if known: .

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> 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.

(b)	General Tributary	Characteristics (check all that app	ply):		
. ,	Tributary is:	☐ Natural			
	·	Artificial (man-made). Expl	lain:		
		Manipulated (man-altered).	Explai	ain: Channel has been routed into roadside ditch.	
	Average wid	th: .5 to 2 feet	stimate)	e):	
	Primary tributary :  Silts Cobbles Bedrock Other. Ex			oply):  Concrete  Muck ver: grasses present on banks.	
g :1 1		n/stability [e.g., highly eroding, s	loughin	ing banks]. Explain: Slightly turbid, pools and slow to moderate	
flow;oily shee	Presence of run/rit Tributary geometr	ffle/pool complexes. Explain: Poory: <b>Relatively straight</b> (approximate average slope): 0.7		run.	
(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: seasonal flow. Other information on duration and volume:				
	Surface flow is: <b>D</b>	iscrete and confined. Characteri	stics:		
		Unknown. Explain findings: Unkther) test performed:	known.	ı.	
	☐ clear, ☐ chang ☐ shelv ☐ veget ☐ leaf l: ☐ sedin ☐ water ☐ other	canks (check all indicators that apply): a natural line impressed on the banges in the character of soil ing cation matted down, bent, or absentiter disturbed or washed away ment deposition staining		the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting scour multiple observed or predicted flow events abrupt change in plant community	
	☐ High Tid☐ oil or☐ fine s☐ physi☐ tidal	an the OHWM were used to determ the Line indicated by: scum line along shore objects shell or debris deposits (foreshore) and markings/characteristics gauges (list):	<ul><li>Mea</li><li>□ s</li><li>○ □ s</li></ul>	lateral extent of CWA jurisdiction (check all that apply): ean High Water Mark indicated by: ] survey to available datum; ] physical markings; ] vegetation lines/changes in vegetation types.	
Cha	Explain: Water is		as repoi		

<sup>&</sup>lt;sup>6</sup>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.

<sup>7</sup>Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width):  Wetland fringe. Characteristics:  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings: Small mammals, insects, amphibians.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics:  General Wetland Characteristics: Properties: Wetland size: total ofacres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			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: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply):  Riparian buffer. Characteristics (type, average width): .  Vegetation type/percent cover. Explain:  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:  Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately ( ) acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: Wetland provides habitat for small mammals, reptiles, insects, and plants. Acts as a sediment and contaminant trap; filtering water prior to entering the un-named tributary to Oak Creek and Oak Creek itself. Segment of the un-named tributary near Oak Creek is listed as a Category IV Saline Wetland. Oak Lake, which is adjacent to Oak Creek, is listed as a TNW and a Category I Saline Wetland.

## C. SIGNIFICANT NEXUS DETERMINATION

5.

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:
- 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:
- 4. Significant nexus findings for Seasonal RPW. Water flows to the east int an un-named tributary to Oak Creek. Oak Creek flows into Salt Creek, which flows into the Platte River, which flows into the Missouri River. The channel exhibits sufficient flow, duration, and volume to transport sediment and contaminants at a frequency and manner that confirms this system has the capacity to have more than a speculative affect on the chemical, physical, and ecological integrity of the un-named tributary (RPW), Oak Creek (RPW), Salt Creek (TNW), Platte River (TNW), and the Missouri River (TNW).
- **D.** DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and A	Adjacent Wetlands.	Check all that ap	ply and provide size estima	tes 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:
	seasonally
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: 2,500 linear feet 2-4width (ft).  Other non-wetland waters: acres.
	Identify type(s) of waters:
3.	Non-RPWs <sup>8</sup> 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:
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:
	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: <b>0.30</b> acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. <sup>9</sup> 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).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $<sup>^8</sup> See$  Footnote # 3.  $^9$  To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	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.
SEC	ΓΙΟΝ ΙV: DATA SOURCES.
<b>A.</b>	UPPORTING 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.  Data sheets prepared by the Corps:  Corps navigable waters' study:  U.S. Geological Survey Hydrologic Atlas:  USGS NHD data.  USGS NHD data.  USGS 8 and 12 digit HUC maps.  U.S. Geological Survey map(s). Cite scale & quad name: Lincoln 1:24,000.  USDA Natural Resources Conservation Service Soil Survey. Citation: Lancaster County Soil Survey.  National wetlands inventory map(s). Cite name: Lincoln.  State/Local wetland inventory map(s):  FEMA/FIRM maps: FMQ3.  100-year Floodplain Elevation is: 1150 (National Geodectic Vertical Datum of 1929)
	100-year Floodplain Elevation is: 1150 (National Geodectic Vertical Datum of 1929)

 $<sup>^{10}</sup>$  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  $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$ 

	Photographs: Aerial (Name & Date):2005 Color Ortho, 199x, Black and White Orthophotos; Aerial photography provided by
cons	sultant for years 1940, 1955, 1961, 1965, 1972, 1977, 1984, 1993, 1999, 2003, 2009; GoogleEarth.
	or  Other (Name & Date):
$\boxtimes$	Previous determination(s). File no. and date of response letter: NWO-2011-02320-WEH, 15 November 2011.
	Applicable/supporting case law: .
	Applicable/supporting scientific literature: .
$\boxtimes$	Other information (please specify): Wetland Delineation done by consultant; Site visits conducted on 19 April, 20 April, 10 May,
2012	2.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The hydrology on the site has been manipulated to accommodate development. Existing drainages have been re-routed into concrete-lined channels, resulting in straight channels as opposed to natural, meandering channels (See soil\_survey.jpg).

WUS-1 is a channel with an ordinary high water mark and defined bed and bank, that has been routed into a roadside ditch. WUS-1 has been mapped by the USFWS National Wetlands Inventory as PSSAx linear wetland, but has developed into a channel, most likely due to increased run-off from surrounding development.

The channel enters an un-named tributary (WUS-3) to Oak Creek, which enters Salt Creek; a TNW. Water flows to the east into the unnamed tributary to Oak Creek. Oak Creek flows into Salt Creek, which flows into the Platte River, which flows into the Missouri River. The channel exhibits sufficient flow, duration, and volume to transport sediment and contaminants at a frequency and manner that confirms this system has the capacity to have more than a speculative affect on the chemical, physical, and ecological integrity of the un-named tributary (RPW), Oak Creek (RPW), Salt Creek (TNW), Platte River (TNW), and the Missouri River (TNW).

Supporting documentation attached includes the following:

- Map3.pdf disply the locations of wetlands and acreages, and channels;
- wus\_locations.jpg displays locations of waters of the United States;
- sig\_nex.jpg illustrates significant nexus route;
- soil\_survey.jpg displays historic drainage patters.