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

- I.A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): Final 09/17/2012
- I.B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Omaha District, NWO 2011-01052-WEH, Mr. Daryll Lightner, Irrigation Dam, northwest of Verdigre, Nebraska
- I.C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: NE County/parish/borough: Knox City: Rural, northwest of Verdigre, Nebraska Center coordinates of site (lat/long in degree decimal format): Project Location - Lat. 42.6849° Long. -98.190067° WGS 1984 Universal Transverse Mercator: [] 13, [] 14, [] 15 SE1/4 of SE1/4 in Section 1, Township 31 North, Range 8 West, Knox County, Nebraska

Sites approximately: WGS 1984 Soldier Creek (Perennial), tributary to Niobrara River:

Site W1a = 42.6847° , -98.19235° PEMA	Site CF1_677ft = 42.68459° , -98.19168° PEMA
(RPWWD)	(RPWWD)
Site W2a = 42.6842° , -98.19215° PEMA	Site CF2_300ft = 42.68417° , -98.19195° PEMA
(RPWWD)	(RPWWD)
Site W3a = 42.68445° , -98.19218° PEMA	Site Ch1_677ft = 42.685° , -98.19057° Riverine
(RPWWD)	Channel (RPW)
Site W4a = 42.68417° , -98.19195° PEMA	Site Ch2_300ft = 42.6482° , -98.19167° Riverine
(RPWWD)	Channel (RPW)

Name of nearest water body: Soldier Creek, reach code 10150007 000765

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

Name of watershed or Hydrologic Unit Code (HUC): 10150007 Lower Niobrara

- [\mathbf{X}] Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. **Attached.**
- [] 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.

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

- [X] Office (Desk) Determination. Date: 13 Sep 2012
- [X] Field Determination. Date(s): 14 Aug 2012

SECTION II: SUMMARY OF FINDINGS

II.A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There [X] Are No OR [] Are OR [] Are and Are Not OR [] Appear to be No OR [] Appear to be
OR [] Appear to be and Appear Not to be "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:
II.B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
There [] ARE NO OR [X] ARE OR [] Are and Are Not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
II.B.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; [III.A]
[] Wetlands adjacent to TNWs;
[X] Relatively permanent waters ² (RPWs) that flow directly or indirectly into
TNWs [Year round III.D.2; Flows seasonally III.D.2, III.B1]
Non-RPWs that flow directly or indirectly into TNWs
[X] Wetlands directly abutting RPWs that flow directly or indirectly into
TNWs [Year round III.D.2 & III.D.4; Flows seasonally III.B.1, B.2(pg 57), III.D.2, III.D4]
[] 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: 977 linear feet: 2 width (ft) and/or 00 acres.
Wetlands: Riverine Channel Fringe wetlands and depressional wetlands abutting WOUS:
0.91-acre.

Directly abuts?	(Y/N)	Size (in acres)	Directly abuts?	(Y/N)	Size (in acres)
Site W1a	Y	0.37	Site W4a	Y	0.02
Site W2a	Y	0.25	Site CF1	Y	0.06
Site W3a	Y	0.18	Site CF2	Y	0.03

c.	Limits (boundaries) of jurisdiction based on: [] Not Applicable; [X] 1987 Delineation Manual; [
	X] Established by OHWM; [] Established by Outer Continental Shelf limits; [] Sea-ward limit of
	the territorial seas; [] within 3-mile baseline; [] Established by mean (average) high waters; []
	Established by Corps navigation study; [] Not established at this time. Elevation of established OHWM (if known): 00.

II.B.2. Non-regulated waters/wetlands (check if applicable): See III.F.

[] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: __.

SECTION III: CWA ANALYSIS

III.A. TNWs AND WETLANDS ADJACENT TO TNWs

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.

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.

III.A.1. TNW Identify TNW: _. Summarize rationale supporting determination: __.

III.A.2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": N.A.

III.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 whether 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.

III.B.1. Characteristics of non-TNWs that flow directly or indirectly into TNW

III.B.1.(i) General Area Conditions:

Watershed size: 0,000 acres / sq. miles (HUC 12) Drainage area: 0,000 acres / sq. miles (HUC 12)

Average annual rainfall: **0.0** - inches Average annual snowfall: **0.0** - inches

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

III.B.1.(ii) Physical Characteristics: B.1.(ii)(a) Relationship with TNW:
[] Tributary flows directly into TNW. [] Tributary flows through [1, 2, 3,_or 10] tributaries before entering TNW
Project waters are [2-5] river miles from TNW. Project waters are [1 or less, 1-2, 2-5, 5-10] river miles from RPW. Project waters are [1 or less, 1-2, 2-5, 5-10] aerial (straight) miles from TNW. Project waters are [1 or less, 1-2, 2-5, 5-10] aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: NA
Identify flow route to TNW ⁵ : Tributary stream order, if known:
III.B.1.ii.(b) General Tributary Characteristics (check all that apply): Tributary is: [] Natural [] Artificial (man-made). Explain: [] Manipulated (man-altered). Explain:
Tributary properties with respect to top of bank (estimate): Average width: 2-ft Average depth: varies 1 to 2-feet Average side slopes: [Vertical-1:1, 1½:1, 2:1, 3:1, 4:1 or greater].
Primary tributary substrate composition (check all that apply): [] Silts [X] Sands [] Concrete [] Gravel [X] Muck [] Bedrock [] Vegetation. Type PEMA/C cover: 95 % [] Other. Explain:
Tributary condition / stability [e.g., highly eroding, sloughing banks]. Explain: . Presence of run/riffle/pool complexes. Explain: . Tributary geometry: [] Relatively straight [] Meandering Tributary gradient (approximate average slope): 1-2 %
III.B.1.ii. (c) Flow: Tributary provides for: [] Seasonal Flow; [] Intermittent, but not seasonal; [] Ephemeral Flow Estimate average number of flow events in review area / year: [1, 2-5, 20 or greater] Describe flow regime: Perennial. Other information on duration and volume: Unknown.
Surface flow is: $[\]$ Discrete; $[\ X\]$ Confined; $[\]$ Discrete & Confined; $[\]$ Overland Sheetflow. Characteristics: .
Subsurface flow: [] Yes; [] No; [X] Unknown. Explain findings: . [] Dye (or other) test performed:
Tributary has (check all that apply): [] Bed and banks [] OHWM ⁶ (check all indicators that apply):

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.

[] 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. Texplain: NA.
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):
 III.B.1.(iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: . Identify specific pollutants, if known: .
III.B.1.(iv) Biological Characteristics. Channel supports (check all that apply):
[] Riparian corridor. Characteristics (type, average width): .
[] Wetland fringe. Characteristics: .
 [] Habitat for: Migratory birds, small animals, and deer. [] Federally Listed species. Explain findings:
Fish/spawn areas. Explain findings:
Other environmentally-sensitive species. Explain findings:
[] Aquatic / wildlife diversity. Explain findings: Upland migratory birds and small animals habitat. Reptiles and amphibians.
III.B.2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: _
(a) <u>General Wetland Characteristics:</u>
Properties: Wetland size: acres
Wetland type. Explain: .
Wetland quality. Explain: .
Project wetlands cross or serve as state boundaries. Explain: NA.
(b) General Flow Relationship with Non-TNW:
Flow is: [] Intermittent, [] Ephemeral, [] Perennial, [] No Flow. Explain: .

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.

		[X] Discrete; [] Con Not Present. Explain fin		Confined; [] Overland
	Subsurface flov	v: [] Yes; [] No; [] other) test performed:	Unknown. Explain fin	ndings: .	
(c)	[] Di [] Not directl [] Discrete [] Ecologi	ency Determination with prectly abutting y abutting e wetland hydrologic control cal connection. Explain: ed by berm/barrier. Explain	nection. Explain:		
(d)	Project	ntionship) to TNW wetlands are [1 or less, 1 are [1 or less, 1-2, 2-5, 5-1			
	Wetland to / from Estimate approximate app	Wetlands to navigable mavigable waters; [] kimate location of wetlands-500-yr. floodplain.	No Flow		
III.B.2	Characterize we quality; general	cal Characteristics: etland system (e.g., water watershed characteristics llutants, if known: .		oil film on sui	rface; water
]	Riparian corrid Wetland fringe Habitat for: M] Federally I] Fish/spawr] Other envi] Aquatic / v	cal Characteristics. We or. Characteristics:	average width): nals, and deer. ndings: cies. Explain findings	 :	
III.B.3	All wetland(s) l Approximately	es of all wetlands adjaces being considered in the cu (0.00) acres in total are	mulative analysis:		analysis.
Directly ab		d, specify the following: Size (in acres)	Directly abuts?	(Y/N)	Size (in acres)
Summ	arize overall biol	ogical, chemical and phys	sical functions being pe	erformed: .	

III.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 food-webs?
- 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:

- III.C.1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain _
- III.C.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: .
- III.C.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: _.

III.D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

III.D.1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
	[] TNWs: approx. 0,000 linear feet 00 width (ft), Or, 00 acres.
	[] Wetlands adjacent to TNWs: 0.00 acres.

III.D.2. RPWs that flow directly or indirectly into TNWs.

[X] Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:

The hydrology supports year round flows and by groundwater seeps, which feeds Soldier Creek. Reach Code 10150007 000765.

The flow is perennial and the hydrology was evident at the August 2012 site visit and in historical aerial photos.

The PEMA/C wetlands abutting the Soldier Creek are floodplain depressional and riverine channel wetland fringe directly abutting.

Lower Niobrara River becomes a braided river at times of significant flooding in the abutting historic overflow channels. Reach code 10150007 006817

historic overflow channels. Reach code 10150007 006817	
USGS 2012 ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution NHDH_NE.gdb Feature Dataset: Hydrography Feature Class: NHDFlowline	
[] 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): [X] Tributary waters: _2-miles linear feet 20 to 40 width (ft). [] Other non-wetland waters: 00 acres. Identify type(s) of waters:	
 III.D.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 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: 00 linear feet 0-0 width (ft). [] Other non-wetland waters: 00 acres. Identify type(s) of waters:	
III.D.4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. [X] Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.	
[X] 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: _There were PEMA wetlands directly abutting the riverine channel shown in the historical aerials, now inundated by the new flood pool.	
The balance of the PEMA wetlands prior to inundation was at the toe of the downstream darface. These historic wetlands are evident in the historical aerials and resulted due to dam seepage and flows greater than normal low flows. These wetlands directly abut the low flow channel. Refer to the FSA aerial photographs dated 1993, 1999, 2003, 2009, and 2010.	
[] Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide daindicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide	

Provide acreage estimates for jurisdictional wetlands in the review area: approximately 0 acres.

rationale indicating that wetland is directly abutting an RPW:

⁸See Footnote # 3.

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: 00 acres.
 III.D.6. Wetlands adjacent / abutting 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: 0.00 - acres.
III.D.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).
 III.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: xx.
Provide estimates for jurisdictional waters in the review area (check all that apply): [] Tributary waters: 00 linear feet 00 width (ft). [] Other non-wetland waters: 00 acres. Identify type(s) of waters: [] Wetlands: 00 acres.
 III.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 <u>solely</u> on the "Migratory Bird Rule" (MBR). [] Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

To 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.

[] Other: (explain, if not covered above):
Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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): 00 linear feet 00 width (ft). [] Lakes/ponds: 00 acres. [] Other non-wetland waters: 00 acres. List type of aquatic resource:
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): 00 linear feet, 00 width (ft). [] Lakes/ponds: 00 acres. [] Other non-wetland waters: 00 acres. List type of aquatic resource: xx. [] Wetlands: 0.0-acre PEMA
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): X Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: X Data sheets prepared/submitted by or on behalf of the applicant/consultant. X Office concurs with data sheets/delineation report. Field reviewed existing conditions. The downstream channel and wetlands appear to resemble the wetland conditions prior to the new flood pool. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: Y U.S. Geological Survey Hydrologic Atlas: X U.S. Geological Survey Hydrologic Atlas: X USGS NHD data. USGS NHD data - Data Type: USGS NHD data - Data Type: ArcGIS Map Service, Internet Server: http://services.nationalmap.gov/ArcGIS/services/nhd /MapServer/wmsserver? Service Name: nhd; NHDH_NE.gdb Feature Dataset: Hydrography
Feature Class: NHDFlowline [X] USGS 8 and 12 digit HUC maps. Data Type: NHDH_NE.gdb, Feature Dataset: WBD, Feature Class: WBD_HU12; corporate data: Hydro_Units\HUC8\hydro_units100_alb.shp [X] U.S. Geological Survey map(s). Cite scale & quad name: Data Type: ArcIMS Image Service, Internet Server: http://seamless.usgs.gov, Image Service: USGS_EDC_Ortho_DRG /OR/ WMS Server: http://raster.nationalmap.gov/ArcGIS/services/DRG /TNM_Digital_Raster_Graphics/ MapServer/wmsserver? Service Name: TNM_Digital_Raster_Graphics [X] USDA Natural Resources Conservation Service Soil Survey. Citation: USDA NRCS. Natural Resources Conservation Service Soil Survey. http://SDMDataAccess.nrcs.usda.gov
/Spatial/SDM.wms? [X] National wetlands inventory map(s). Cite name: Data Type: WMS Server: http://137.227.242.85/ArcGIS/services/FWS_Wetlands_WMS/mapserver/wmsserver? Service Name: FWS_Wetlands_WMS and USACE Corporate GIS dataset [] State/Local wetland inventory map(s): [] FEMA/FIRM maps: [] 100-year Floodplain Elevation is: 00 (National Geodetic {Vertical Datum of 1929)} [] Photographs: [X] Aerial (Name & Date): ArcGIS/IMS Image Service, Internet Server:
http://maps.dnr.ne.gov/arcgis/services [2010 FSA, 2009Imagery FSA];

http://dnrmap2.dnr.state.ne.us [doqwms]; http://maps.dnr.ne.gov/arcgis/services 2009; and http://gis.apfo.usda.gov/arcgis/services [MDOQ/National_MDOQ]; Google Earth Pro historic aerials.
OR [] Other (Name & Date):
[] Previous determination(s). File no. and date of response letter:
[] Applicable/supporting case law:
[] Applicable/supporting scientific literature:
[] Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:



