

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): DRAFT

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Kansas City District, Oddo Development Co., Inc., Trib. to Blue River, Johnson County, Kansas, NWK 2012-00433

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Kansas** County/parish/borough: **Johnson** City: **Leawood**
Center coordinates of site (lat/long in degree decimal format): Lat. **38.88095800° N**, Long. **-94.62816700° W**.
Universal Transverse Mercator:

Name of nearest waterbody: **Unnamed tributary to the Blue River**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Big Blue River (at river mile 4.38)**

Name of watershed or Hydrologic Unit Code (HUC): **Camp Branch – Blue River (103001010104)**

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: **15 June 2012**

Field Determination. Date(s): **24 April 2012**

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: **2,384** linear feet: **8** width (ft) and/or **0.44** acres.

Wetlands: **1.06** acres in total (**4 wetlands**).

Wetland #1: **0.06** acres.

Wetland #2: **0.05** acres.

Wetland #3: **0.77** acres.

Wetland #4: **0.18** acres.

Impoundments: **2.85** acres in total (**2 ponds – open water**)

Impoundment #1: **0.52** acres open water

Impoundment #2: **2.33** acres open water

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

Elevation of established OHWM (if known): .

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).

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**

(i) **General Area Conditions:**

Watershed size: **231 acres**

Drainage area: **90 acres**

Average annual rainfall: **37 inches**

Average annual snowfall: **20 inches**

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through **2** tributaries before entering TNW.

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

Project waters are **2-5** river miles from RPW.

Project waters are **15-20** aerial (straight) miles from TNW.

Project waters are **1-2** aerial (straight) miles from RPW.

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.

Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁵: **The unnamed ephemeral tributary to the Blue River flows for approximately 2,384 linear feet through several abutting wetlands and agricultural ponds to the confluence of another unnamed ephemeral tributary. It then flows for approximately 2.1 miles to an Relatively Permanent Water (RPW), the Blue River. Flow on the Blue River then continues downstream for approximately 10.2 miles to the confluence with Indian Creek. It then flows for approximately 16 miles to where the Blue River is identified as the Big Blue River (a TNW). This point is located approximately 4.38 miles above the confluence with the Missouri River.**

Tributary stream order, if known: **1st Order**

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

Tributary is:

Natural

Artificial (man-made). Explain:

Manipulated (man-altered). Explain: **The stream reach has been highly manipulated**

throughout most of its length. The upper extent was previously mapped as a dashed blue line stream on the topographic quad map. At some time in the past, several farm ponds were constructed on the project area. It then appears that the stream was converted into a grassed waterway, likely vegetated with Tall Fescue and Reed canarygrass. The headwaters areas was also impounded by a man-made pond, then the headwaters area was widely disturbed with the result being high levels of soil erosion. Upper pond areas appear to have been reduced in volume by sediment deposition. This resulted in increased concentrated storm flows which has eroded a new pilot channel within the project area. This pilot channel is erosional, v-shaped, and has deposited sediments in segments on the project area which have become wetlands with pedistoled fescue. This segment is likely the earliest beginnings of channel evolution and will probably drain the wetland features in the near future. After leaving the lower project area pond (which still has significant storage volume), the channel is mostly straight with incisement. It then flows through channelized segments, roadway culvert, piping and into another man-made impoundment. Within that impoundment, this stream reach joins with another stream and this is where the bottom of the stream reach is defined.

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

Average width: **8** feet

Average depth: **6** feet

Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

Silts

Sands

Concrete

Cobbles

Gravel

Muck

Bedrock

Vegetation. **Tall Fescue & Reed canarygrass/~44% cover: Within project area.**

Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **Upper part of reach is highly eroding, lower part is currently protected from storm flows due to man-made impoundments.**

Presence of run/riffle/pool complexes. Explain: **Mostly pool and run.**

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **~2 %**

(c) Flow:

Tributary provides for: **Ephemeral flow**

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

Describe flow regime: Ephemeral. **The flows have increased with the increasingly urbanized watershed and reduced volume of headwaters man-made impoundments.**

Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics:

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

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

- vegetation matted down, bent, or absent
- leaf litter disturbed or washed away
- sediment deposition
- water staining
- other (list):
- Discontinuous OHWM.⁷ Explain: .
- sediment sorting
- scour
- multiple observed or predicted flow events
- abrupt change in plant community

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

- High Tide Line indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - tidal gauges
 - other (list):
- Mean High Water Mark indicated by:
 - survey to available datum;
 - physical markings;
 - vegetation lines/changes in vegetation types.

(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: **The tributary conveys and filters sediments, herbicides, pesticides, fertilizers, and other pollutants (i.e. salts from roadways) from an urbanizing watershed having roadways, residential and commercial developments.**

(iv) Biological 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: **Aquatic invertebrates are likely to inhabit the stream reach.**

Seasonal use by aquatic vertebrates is also likely..

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: **Wetland #3 (0.77 ac.), Wetland #2 (0.05 ac.), Wetland #1 (0.06 ac.), and Wetland #4 (0.18 ac.).**

Wetland type. Explain: **Mostly palustrine emergent (PEMA).**

Wetland quality. Explain: **Fair. Most wetland areas are impaired by invasive exotic plants.**

Project wetlands cross or serve as state boundaries. Explain: **N/A.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow.** Explain: .

Surface flow is: **Discrete and confined**

Characteristics: .

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

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: **Wetlands are located within an area receiving concentrated surface runoff, and a vegetated swale.**

Ecological connection. Explain: **The wetlands are associated with the ephemeral drainage and swale. The wetlands are part of a corridor which provides habitat to fish and wildlife. The wetlands are in close proximity to other jurisdictional water features to provide habitat to aquatic insects and vertebrate wildlife species including amphibians, birds and mammals.**

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

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

⁷Ibid.

Project waters are **15-20** aerial (straight) miles from TNW.
 Flow is from: **Wetland to navigable waters**.
 Estimate approximate location of wetland as within the **2-year or less** 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 characterized by having saturated soil, shallow where ponding, and are seasonal, fed by surface runoff, and possibly by subsurface flow. Much of the watershed has developed into urban residential and commercial properties. Lawn management chemicals, petroleum products from the roadways, and nutrients can collect within these wetlands.**

Identify specific pollutants, if known:

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

- Riparian buffer. Characteristics (type, average width): **A sparse woody riparian buffer connects the project area with the downstream part of the stream reach. The upper stream reach is mostly herbaceous along most of the flow path.**
- 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. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **4**
 Approximately (**1.06**) 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 #1 - N	0.06	Wetland #3 - Y	0.77
Wetland #2 - N	0.05	Wetland #4 - N	0.18

Summarize overall biological, chemical and physical functions being performed: **The wetlands have the ability to trap sediments and pollutants from the surrounding watershed. They provide habitat for invertebrate and vertebrate aquatic and terrestrial life. They maintain a hydrologic connection to the downstream TNW, and therefore, combined with their close proximity with one another and the Non-RPW, they have some influence on the chemical, physical, and biological integrity of the Big Blue River (TNW).**

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 reach exhibits an ordinary high water mark and has a definitive indication of bed and bank. The 1st order reach that was evaluated has a length is 0.75 miles. The point of outflow for the stream is 2.1 miles from the confluence with the Blue River, a RPW, and 26.2 miles from the Big Blue River TNW designated water. Considering the stream's increasingly urbanized watershed area and the geomorphic locations of the adjacent and abutting wetlands, functions occur which include sediment and pollutant trapping and transport to the downstream TNW. Additionally, aerial photography indicates that additional wetlands and impoundments are located in adjacent tributaries which all have a similar relationship with the downstream TNW. These water features are in close proximity to one another and to their Non-RPW streams. The close proximity of these areas provide habitat for aquatic life, such as insects and amphibians, as well as for terrestrial life, such as reptiles, mammals and birds. In summary, the reach and its abutting and adjacent wetlands have a significant nexus with 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:

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: **3,950** linear feet **8** width (ft).

The tributary appears to have been highly manipulated during the recent past. Several livestock ponds were constructed within the project area and a jurisdictional stream was shaped into a grassed waterway. When the upstream watershed area was disturbed, significant sediment deposition occurred in the north livestock pond, and throughout the upper stream reach. Areas of the grassed waterway trapped sediment and formed wetlands. The reduced north pond capacity has resulted in increased stormwater runoff and several areas, between the north and middle ponds in the evaluated reach, have exhibited erosional gully features. In detail, the reach is composed of an upper extent of ephemeral stream (~149 l.f.), then there is approximately 1,286 l.f. of grassed waterway with abutting wetlands and several gully erosion areas. The stream reach below the middle pond area is approximately 1,515 l.f. in length and exhibits jurisdictional stream characteristics. This part of the reach is located outside of the project area.

Other non-wetland waters: acres.
 Identify type(s) of waters:

⁸See Footnote # 3.

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: 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: 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: **1.06** 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): .

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.

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.

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: **Terra Technologies Jurisdictional Assessment delineation sheets, dated 30 April 2012.**
- 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 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: **Lenexa, Kans., 1:24K.**
- USDA Natural Resources Conservation Service Soil Survey. Citation: **Web Soil Survey (WSS).**
- National wetlands inventory map(s). Cite name: **Google Earth Pro data layer.**
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 - or Other (Name & Date): **Terra Technologies, Inc. See attachments.**
- 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: .

See the attached photos & maps on the following pages.

PHOTO LOG

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing southeast showing the erosional feature that then flows into Wetland #1.	
PHOTO #: 13	

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing northwest showing the erosional feature separating Wetland #1 and Wetland #2.	
PHOTO #: 14	

PHOTO LOG

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph of the erosional feature separating Wetland #1 and Wetland #2 and the non-hummocked fescue growing along it.	
PHOTO #: 15	

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing south southeast of the erosional feature in-between Wetland #1 and Wetland #2.	
PHOTO #: 16	

PHOTO LOG

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing north northwest showing of the erosional feature in-between Wetland #1 and Wetland #2.	 A photograph showing a field of tall, green grasses. In the center, there is a distinct, narrow, eroded channel or gully that has formed in the soil. The background shows a line of trees and a clear sky.
PHOTO #: 17	

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing south southeast showing the erosional feature just south of Wetland #2.	 A photograph showing a field of tall, green grasses. In the center, there is a distinct, narrow, eroded channel or gully that has formed in the soil. The background shows a line of trees and a clear sky.
PHOTO #: 18	

PHOTO LOG

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing north northwest showing wetland #2. Note the hummocked fescue.	
PHOTO #: 19	

DATE: 04/30/2012	SITE NAME: Siena Apartments
TAKEN BY: DTD	
COMMENTS: Photograph facing north showing the seep that is on the downstream side of the dam.	
PHOTO #: 20	







