

**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): 4/24/2012**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Chicago District, LRC-2012-150, Abbot Drive

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** 1100 Abbot Drive

State: Illinois County/parish/borough: **Kane** City: Elgin  
Center coordinates of site (lat/long in degree decimal format): Lat. 42.05578°N, Long. -88.30556° W.  
Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Tyler Creek

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

Name of watershed or Hydrologic Unit Code (HUC): **Upper Fox (07120006)**

- 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: 4/24/12  
 Field Determination. Date(s): 4/5/2012

**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: Defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

**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):<sup>1</sup>**

- 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 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: 350 linear feet: width (ft) and/or acres.  
Wetlands: 0.26 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):<sup>3</sup>**

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

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

<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. TNW**

Identify TNW: **Pick List**.

Summarize rationale supporting determination: As defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

**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: **Pick List**
- Drainage area: **Pick List**
- Average annual rainfall: inches
- Average annual snowfall: inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

- Project waters are **Pick List** river miles from TNW.
- Project waters are **Pick List** river miles from RPW.
- Project waters are **Pick List** aerial (straight) miles from TNW.
- Project waters are **Pick List** aerial (straight) miles from RPW.
- Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>:  
Tributary stream order, if known:

<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>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 apply):

- Tributary** is:  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain:

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

Average width:           feet  
Average depth:           feet  
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts           | <input type="checkbox"/> Sands                     | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles         | <input type="checkbox"/> Gravel                    | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock         | <input type="checkbox"/> Vegetation. Type/% cover: |                                   |
| <input type="checkbox"/> Other. Explain: |  |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope):           %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

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

- Dye (or other) test performed:

Tributary has (check all that apply):

- |   |   |
|---|---|
| <input type="checkbox"/> Bed and banks  |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input type="checkbox"/> clear, natural line impressed on the bank            | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                     | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                  | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining                                       | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):  |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain:            |   |

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

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

(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:

<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) **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:

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:            acres

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) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

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

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

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

For each wetland, specify the following:

<u>Name/ID</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Name/ID</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
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Summarize overall biological, chemical and physical functions being performed:

### 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:
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: Tyler Creek is a perennial wetland.
  - 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: **350** linear feet width (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: **Tyler Creek is a perennial stream.**  
 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: **0.26** 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: \_\_\_\_\_ 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).

**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):<sup>10</sup>**

- 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:** \_\_\_\_\_

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<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 Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

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.

**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: Wetland Assesment dated 3-1-2012.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report. However is out of growing season
  - 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:Elgin HA 147, 1965.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Elgin 7.5", 1992, Pick List, Pick List.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Kane County, Illinois (2003).
- National wetlands inventory map(s). Cite name: Elgin.
- State/Local wetland inventory map(s): Kane County ADID, NRCS Swampbuster Map.
- FEMA/FIRM maps:
  - 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 2008.  
or  Other (Name & Date): site visit 4/5/2012.
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45. (S.D.Ill. Jan. 20. 1979)
- Applicable/supporting scientific literature:
- Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** Wetland 1 includes Tyler Creek, directly abutting wetlands and a small stream within the directly abutting wetlands. This wetland is ADID High Functioning wetland #1351, and Tyler Creek is a Biologically Significant Stream.

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**U.S. Army Corps of Engineers**

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**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 4/24/2012**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Chicago District, LRC-2012-43, Main Street at Nelson Lake Road

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** Main Street at Nelson Lake Road

State: Illinois County/parish/borough: **Kane** City: Batavia Township  
Center coordinates of site (lat/long in degree decimal format): Lat. 41.84339°N, Long. -88.36983° W.  
Universal Transverse Mercator: NAD 83

Name of nearest waterbody: Lake Run

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

Name of watershed or Hydrologic Unit Code (HUC): **Lower Fox (07120007)**

- 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: 4/24/2012  
 Field Determination. Date(s):

**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: Defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

**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):<sup>1</sup>**

- 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 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: 3000 linear feet: width (ft) and/or acres.  
Wetlands: 3.02 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):<sup>3</sup>**

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.  
Explain: **Sites 3 and 4 are man-made roadside ditches not regulated by the Corps.**

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

<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. TNW

Identify TNW: **Pick List**.

Summarize rationale supporting determination: As defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

##### 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: 14.6 acres  
Drainage area: 14.6 acres  
Average annual rainfall: 38 inches  
Average annual snowfall: 31 inches

###### (ii) Physical Characteristics:

###### (a) Relationship with TNW:

- Tributary flows directly into TNW.  
 Tributary flows through 1 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.  
Project waters are 1 (or less) river miles from RPW.  
Project waters are 2-5 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>: Lake Run to Blackberry Creek to Fox River.  
Tributary stream order, if known: 1.

<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>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 apply):

- Tributary is:  Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain:

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

Average width: 5 feet  
Average depth:        feet  
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts           | <input type="checkbox"/> Sands                     | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles         | <input type="checkbox"/> Gravel                    | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock         | <input type="checkbox"/> Vegetation. Type/% cover: |                                   |
| <input type="checkbox"/> Other. Explain: |  |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope):        %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Overland sheetflow.** Characteristics:

Subsurface flow: **Yes.** Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Bed and banks                             |   |
| <input type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input type="checkbox"/> clear, natural line impressed on the bank            | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                     | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                           |
| <input type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition                                  | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining                                       | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):  |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain:            |   |

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

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

(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:

<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) **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: 6 State endangered birds.
  - Aquatic/wildlife diversity. Explain findings:

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:            acres

Wetland type. Explain: marsh.

Wetland quality. Explain: high, ADID high habitat and an Illinois Nature Preserve.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain:

Surface flow is: **Overland sheetflow**

Characteristics:

Subsurface flow: **Yes**. 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 **2-5** river miles from TNW.

Project waters are **2-5** 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:

Identify specific pollutants, if known:

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

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

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

For each wetland, specify the following:

Name/ID	Directly abuts? (Y/N)	Size (in acres)	Name/ID	Directly abuts? (Y/N)	Size (in acres)
---------	-----------------------	-----------------	---------	-----------------------	-----------------

Summarize overall biological, chemical and physical functions being performed:

### 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:
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: 3.02. Lake Run is a seasonal RPW.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **3000** linear feet width (ft).  
 Other non-wetland waters: \_\_\_\_\_ acres.

Identify type(s) of waters: **Lake Run flows through Nelson Lake.**

**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: wetlands surround Lake Run, directly abutting. Sites 1 and 6 are hydrologically connected through pipes/culverts under roads built through the wetlands.

Provide acreage estimates for jurisdictional wetlands in the review area: **3.02** 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: \_\_\_\_\_ 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).

**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):<sup>10</sup>**

- 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:** \_\_\_\_\_

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<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 Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

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): **USACE does not regulate man-made roadside ditches (Sites 3 and 4).**

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: Wetland Investigation dated 9/2010.
- 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: Pick List, .
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Aurora North 7.5", 1993. Pick List. Pick List. .
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Kane County, Illinois (2003).
- National wetlands inventory map(s). Cite name: Aurora North. .
- State/Local wetland inventory map(s): Kane County ADID, Illinois Natural Areas Inventory. .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 1999, 2000, 2001, 2002, 2003.  
or  Other (Name & Date): 6/18/2010 in Wetland Investigation Report.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
- Applicable/supporting scientific literature: .
- Other information (please specify): .

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** Sites 1, 2, 5, 6 and 7 are a wetland complex that drain through Nelson Lake and Lake Run to Blackberry Creek, and to the Fox River, a navigable waterway. Sites 2, 5 and 7 are within ADID high habitat wetland #2524. Site 6 is ADID high functioning wetland #2837. Site 5 is part of the Nelson Lake Marsh Nature Preserve, which contains fens and is within the Dick Young Forest Preserve. Sites 1, 2, 5, and 6 are all hydrologically connected and are considered one large wetland complex that includes Lake Run, a seasonal RPW, and its directly abutting wetlands. Sites 3 and 4 are non-regulated man-made roadside ditches.

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 11-Apr-2012

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Chicago District, LRC-2011-00596-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : IL - Illinois  
 County/parish/borough: McHenry  
 City: Marengo  
 Lat: 42.2648  
 Long: -88.589  
 Universal Transverse Mercator

Folder UTM List  
*UTM list determined by folder location*

- NAD83 / UTM zone 16N

Waters UTM List  
*UTM list determined by waters location*

- NAD83 / UTM zone 16N

Name of nearest waterbody: Kishwaukee River

Name of nearest Traditional Navigable Water (TNW): Rock River

Name of watershed or Hydrologic Unit Code (HUC): Kishwaukee River

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 the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**

Office Determination Date: 11-Apr-2012

Field Determination Date(s):

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

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 "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
LRC-2011-596 Farmed Wetland 1	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
LRC-2011-596 Farmed Wetland 2	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
LRC-2011-596 Farmed Wetland 3	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
LRC-2011-596 Kisuwaukee River & Wetland	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on:

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

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**

**1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

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

**(i) General Area Conditions:**

Watershed size:

Drainage area:

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

Number of tributaries

Project waters are river miles from TNW.

Project waters are river miles from RPW.  
 Project Waters are aerial (straight) miles from TNW.  
 Project waters are aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Tributary Stream Order, if known:

Order	Tributary Name
-	LRC-2011-596 Kiswaukee River & Wetland

(b) General Tributary Characteristics:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRC-2011-596 Kiswaukee River & Wetland	X	X	northern channel is a created channel, pre-1939 based on aerial photo	-	portions are relatively unmodified, other ware

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRC-2011-596 Kiswaukee River & Wetland	100	5	4:1 (or greater)

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRC-2011-596 Kiswaukee River & Wetland	X	-	-	-	-	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
LRC-2011-596 Kiswaukee River & Wetland	This tributary has a broad wetland areas associated on either side of it. The banks are thought to be relatively stable based on limited migration between old and recent arials.	-	Meandering	1

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRC-2011-596 Kiswaukee River & Wetland	Perennial flow	20 (or greater)	continuous year-round flow	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
LRC-2011-596 Kiswaukee River & Wetland	-	-

Subsurface Flow:

--

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRC-2011-596 Kiswaukee River & Wetland	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM <sup>7</sup>	Explain
LRC-2011-596 Kiswaukee River & Wetland	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:  
Not Applicable.

Mean High Water Mark indicated by:  
Not Applicable.

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

Tributary Name	Explain	Identify specific pollutants, if known
LRC-2011-596 Kiswaukee River & Wetland	water discolored with sediment in delineation report photo. Despite influence of agricultural runoff, this stream is viewed as being high quality	agricultural runoff

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRC-2011-596 Kiswaukee River & Wetland	X	Mostly wooded	X	-	X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish/Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
LRC-2011-596 Kiswaukee River & Wetland	X	-	-	X	-	-	-	X	-

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
LRC-2011-596 Farmed Wetland 1	.5	Farmed Wetland	associated with high quality stream and wetland complex	-
LRC-2011-596 Farmed Wetland 2	.25	farmed	associated with high quality wetland corridor	-
LRC-2011-596 Farmed Wetland 3	.1	farmed	associated with high quality river corridor	-

(b) General Flow Relationship with Non-TNW:

Wetland Name	Flow	Explain
LRC-2011-596 Farmed Wetland 1	Intermittent flow.	-
LRC-2011-596 Farmed Wetland 2	Intermittent flow.	-
LRC-2011-596 Farmed Wetland 3	Intermittent flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
LRC-2011-596 Farmed Wetland 1	Overland sheetflow	Farmed wetland directly abuts a channel draining to the Kishwaukee River and is part of the non-farmed wetlands along the river.
LRC-2011-596 Farmed Wetland 2	Overland sheetflow	flow likely goes both ways between wetland and river
LRC-2011-596 Farmed Wetland 3	Overland sheetflow	flow likely exchanges both ways between wetland and river

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRC-2011-596 Farmed Wetland 1	Unknown	-	-
LRC-2011-596 Farmed Wetland 2	Unknown	-	-
LRC-2011-596 Farmed Wetland 3	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
LRC-2011-596 Farmed Wetland 1	Yes	-	-	-
LRC-2011-596 Farmed Wetland 2	No	-	X	X
LRC-2011-596 Farmed Wetland 3	No	-	X	X

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
LRC-2011-596 Farmed Wetland 1	30 (or more)	25-30	Wetland to navigable waters	-
LRC-2011-596 Farmed Wetland 2	30 (or more)	25-30	Wetland to navigable waters	-
LRC-2011-596 Farmed Wetland 3	30 (or more)	25-30	Wetland to navigable waters	-

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if known
LRC-2011-596 Farmed Wetland 1	-	-
LRC-2011-596 Farmed Wetland 2	-	-
LRC-2011-596 Farmed Wetland 3	-	-

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
LRC-2011-596 Farmed Wetland 1	-	-	-	-
LRC-2011-596 Farmed Wetland 2	-	-	-	-
LRC-2011-596 Farmed Wetland 3	-	-	-	-

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

All wetlands being considered in the cumulative analysis:  
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:  
Not Applicable.

**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.

Significant Nexus: Not Applicable

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:**

1. TNWs and Adjacent Wetlands:  
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
LRC-2011-596 Kiswaukee River & Wetland	PERENNIAL	Solid blue line on USGS map, known high quality perennial stream.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRC-2011-596 Kiswaukee River & Wetland	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	-	12140.568
<b>Total:</b>		<b>0</b>	<b>12140.568</b>

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Wetland Name	Flow	Explain
LRC-2011-596 Farmed Wetland 1	SEASONAL	Farmed wetland directly abuts a channel draining to the Kishwaukee River and is part of the non-farmed wetlands along the river.
LRC-2011-596 Farmed Wetland 2	PERENNIAL	Farmed wetland directly abuts wetlands associated with the Kishwaukee River corridor.
LRC-2011-596 Farmed Wetland 3	SEASONAL	wetland shares an ecological connection with larger wetland complex associated with Kishwaukee River

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

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRC-2011-596 Farmed Wetland 1	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	2023.428
LRC-2011-596 Farmed Wetland 2	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	1011.714
LRC-2011-596 Farmed Wetland 3	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	404.6856
<b>Total:</b>		<b>0</b>	<b>3439.8276</b>

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

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

Not Applicable.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**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:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS**

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):

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:  
Not Applicable.

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.  
Not Applicable.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD**  
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
---Office concurs with data sheets/delineation report	-	-
-Other information	2 foot contour map	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

- 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.
- 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.
- 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.
- 7-Ibid.
- 8-See Footnote #3.
- 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.

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 13-Apr-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2012-00133-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : IL - Illinois  
 County/parish/borough: McHenry  
 City: Harvard  
 Lat: 42.41465  
 Long: -88.61835  
 Universal Transverse Mercator: Folder UTM List  
 UTM list determined by folder location  
 • NAD83 / UTM zone 16N  
 Waters UTM List  
 UTM list determined by waters location  
 • NAD83 / UTM zone 16N  
 Name of nearest waterbody: Mokeler Creek  
 Name of nearest Traditional Navigable Water (TNW): Rock River  
 Name of watershed or Hydrologic Unit Code (HUC): Kishwaukee River

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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 13-Apr-2012  
 Field Determination Date(s): 27-Mar-2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

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 "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
LRC-2012-133 Mokeler Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

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

1. TNW

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

(i) General Area Conditions:

Watershed size:

Drainage area:

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

Number of tributaries

Project waters are river miles from TNW.

Project waters are river miles from RPW.

Project Waters are aerial (straight) miles from TNW.

Project waters are aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

**Tributary Stream Order, if known:**

Order	Tributary Name
-	LRC-2012-133 Mokeler Creek

**(b) General Tributary Characteristics:**

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
LRC-2012-133 Mokeler Creek	-	-	-	X	was straightened, likely in the distant past

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
LRC-2012-133 Mokeler Creek	5	.5	2:1

**Primary tributary substrate composition:**

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
LRC-2012-133 Mokeler Creek	-	X	-	-	X	-	-	-	-

**Tributary (conditions, stability, presence, geometry, gradient):**

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
LRC-2012-133 Mokeler Creek	-	-	Relatively straight	1

**(c) Flow:**

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
LRC-2012-133 Mokeler Creek	Perennial flow	20 (or greater)	continuous	-

**Surface Flow is:**

Tributary Name	Surface Flow	Characteristics
LRC-2012-133 Mokeler Creek	Confined	limited wetland fringe

**Subsurface Flow:**

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
LRC-2012-133 Mokeler Creek	Unknown	-	-

**Tributary has:**

Tributary Name	Bed & Banks	OHW	Discontinuous OHWM*	Explain
LRC-2012-133 Mokeler Creek	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable

Mean High Water Mark indicated by:

Not Applicable

**(iii) Chemical Characteristics:**

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

Tributary Name	Explain	Identify specific pollutants, if known
LRC-2012-133 Mokeler Creek	clear during 27 MAR 12 site visit	-

**(iv) Biological Characteristics. Channel supports:**

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
LRC-2012-133 Mokeler Creek	-	-	X	very limited	X

**Habitat for: (as indicated above)**

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish/Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
LRC-2012-133 Mokeler Creek	X	-	-	-	-	-	-	X	-

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**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:<sup>10</sup>**  
 Not Applicable.

**Identify water body and summarize rationale supporting determination:**  
 Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**  
 Not Applicable.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS**

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):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**  
 Not Applicable.

**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.**  
 Not Applicable.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD**

(Listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Delineation Report	Photos and resource maps provided, but no data points. Delineation boundaries were best determined by the change in vegetation and slope change, which made a detailed delineation with data points unnecessary.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.  
<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.  
<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the east and West.  
<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.  
<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.  
<sup>8</sup>-See Footnote #3  
<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.  
<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 Memorandum Regarding CWA Act Jurisdiction Following Repanos.

(i) Physical Characteristics:  
 (a) General Wetland Characteristics:  
 Properties:  
 Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:  
 Not Applicable.

Surface flow is:  
 Not Applicable.

Subsurface flow:  
 Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:  
 Not Applicable.

(d) Proximity (Relationship) to TNW:  
 Not Applicable.

(ii) Chemical Characteristics:  
 Characterize tributary (e.g., water color is clear, discolored, oily film; water quality: general watershed characteristics, etc.).  
 Not Applicable.

(iii) Biological Characteristics. Wetland supports:  
 Not Applicable.

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

All wetlands being considered in the cumulative analysis:  
 Not Applicable.

Summarize overall biological, chemical and physical functions being performed:  
 Not Applicable.

**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.

Significant Nexus: Not Applicable

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:**

1. TNWs and Adjacent Wetlands:  
 Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
LRC-2012-133 Mokeler Creek	PERENNIAL	Solid blue line on USGS.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
LRC-2012-133 Mokeler Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	-	809.3712
<b>Total:</b>		<b>0</b>	<b>809.3712</b>

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>  
 Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>

Not Applicable.

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20-Mar-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2012-00204-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	IN - Indiana
County/parish/borough:	Porter
City:	
Lat:	41.59518
Long:	-87.07096
Universal Transverse Mercator	Folder UTM List <u>UTM list determined by folder location</u> • NAD83 / UTM zone 16N Waters UTM List <u>UTM list determined by waters location</u>

Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW):

Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 10-Apr-2012

Field Determination Date(s): 06-Apr-2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area

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 "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
Wetland	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

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

1. TNW

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

(i) General Area Conditions:

Watershed size:

Drainage area:

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

Number of tributaries

Project waters are river miles from TNW.

Project waters are river miles from RPW.

Project Waters are aerial (straight) miles from TNW.

Project waters are aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Tributary Stream Order, if known:

Not Applicable

(b) General Tributary Characteristics:

Tributary is:

Not Applicable

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

Not Applicable

Primary tributary substrate composition:

Not Applicable

Tributary (conditions, stability, presence, geometry, gradient):

Not Applicable

(c) Flow:

Not Applicable

Surface Flow is:

Not Applicable

Subsurface Flow:

Not Applicable

Tributary has:

Not Applicable

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable

Mean High Water Mark indicated by:

Not Applicable

(iii) Chemical Characteristics:

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

Not Applicable

(iv) Biological Characteristics. Channel supports:

Not Applicable

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
Wetland	8.66	Emergent with Tree/Shrub shoreline.	Moderate	-

(b) General Flow Relationship with Non-TNW:

Flow is:

Wetland Name	Flow	Explain
Wetland	Perennial flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Wetland	Overland sheetflow	Large wetland complex receiving water from multiple sources and draining out via the Petersen Ditch.

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Wetland	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Wetland	Yes	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Wetland	30 (or more)	30 (or more)	Wetland to navigable waters	50 - 100-year

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if known
Wetland	-	Unknown

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Wetland	-	-	-	-

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
Wetland	X	-	-	-	-	-	-	X	This wetland is part of a much larger 100+ acre wetland complex, and provides habitat for a multitude of plant and animal species.

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

All wetlands being considered in the cumulative analysis:  
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:  
Not Applicable.

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.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:  
Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>5</sup>  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
Wetland	PERENNIAL	Creek flows year-round.

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
Wetland	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	35045.77296
<b>Total:</b>		<b>0</b>	<b>35045.77296</b>

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:  
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:  
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:  
Not Applicable.

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable.

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:<sup>10</sup>  
Not Applicable.

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS

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):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:  
Not Applicable.

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.  
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below)

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Wetland Delineation Report	Soil Solutions
--Data sheets prepared/submitted by or on behalf of the applicant/consultant	-	-
---Office concurs with data sheets/delineation report	-	-
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
---USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	-	-
--USDA Natural Resources Conservation Service Soil Survey.	-	-
--National wetlands inventory map(s).	-	-
--Photographs	-	-
---Aerial	-	-
---Other	-	-
--Applicable/supporting case law	-	-
--Other information	-	-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Description

On-site visit on 06 Apr 12 to verify wetland boundary and jurisdiction.

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

<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

<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>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

<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

<sup>8</sup> See Footnote #3

<sup>9</sup> To complete the analysis refer to the key in Section III D 6 of the Instructional Guidebook

<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 Memorandum Regarding CWA Act Jurisdiction Following Rapanos

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 01-Mar-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2012-00152-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : IN - Indiana  
 County/parish/borough: Lake  
 City: Cedar Lake  
 Lat: 41.36546  
 Long: -87.41854  
 Universal Transverse Mercator: Folder UTM List  
*UTM list determined by folder location*  
 • NAD83 / UTM zone 16N  
Waters UTM List  
*UTM list determined by waters location*

Name of nearest waterbody:  
 Name of nearest Traditional Navigable Water (TNW):  
 Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 10-Apr-2012  
 Field Determination Date(s): 06-Apr-2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

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 "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
Cedar Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
Forested Wetland	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)  
 Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:  
 OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

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

1. TNW  
 Not Applicable.

2. Wetland Adjacent to TNW  
 Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

(i) General Area Conditions:  
 Watershed size:  
 Drainage area:

Average annual rainfall: inches  
 Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.  
 Tributary flows through [ ] tributaries before entering TNW.  
 :Number of tributaries

Project waters are river miles from TNW  
 Project waters are river miles from RPW.  
 Project Waters are aerial (straight) miles from TNW.  
 Project waters are aerial(straight) miles from RPW

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Tributary Stream Order, if known:

Order	Tributary Name
2	Cedar Creek

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
Cedar Creek	X	-	-	-	-

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
Cedar Creek	5	1	4:1 (or greater)

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
Cedar Creek	X	X	-	-	X	-	-	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
Cedar Creek	Mostly stable, running through bottomland forested floodplain wetland.	Some small riffles and pools throughout site.	Meandering	1

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
Cedar Creek	Perennial flow	20 (or greater)	Year-round.	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
Cedar Creek	Discrete and confined	Water stays in banks unless there is a flood event, then it sheet flows through the forested wetland/floodplain in the valley

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Cedar Creek	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM?	Explain
Cedar Creek	X	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:  
 Not Applicable.

Mean High Water Mark indicated by:  
 Not Applicable.

(iii) Chemical Characteristics:

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

Tributary Name	Explain	Identify specific pollutants, if known
Cedar Creek	Water is clear.	Unknown

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Habitat
Cedar Creek	-	-	X	Creek runs through valley with forested floodplain wetland that is 50-200 feet beyond creek bed. X

Habitat for: (as indicated above)

Tributary Name	Habitat	Federally Listed Species	Explain Findings	Fish/Spawn Areas	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Fi
Cedar Creek	X	-	-	-	-	-	-	X	Lots of anir tracks in m wetland

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
Forested Wetland	3.75	Forested	Moderate-High	-

(b) General Flow Relationship with Non-TNW:

Flow is:

Wetland Name	Flow	Explain
Forested Wetland	Perennial flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Forested Wetland	Overland sheetflow	Creek overflows banks in storm events and flows through valley forested wetland

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Forested Wetland	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Forested Wetland	Yes	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Forested Wetland	30 (or more)	30 (or more)	Wetland to navigable waters	2-year or less

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if known
Forested Wetland	-	Unknown.

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Forested Wetland	X	50-250 feet of valley forested wetland and floodplain; lots of usage by wildlife.	-	-

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

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable

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 an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
Cedar Creek	PERENNIAL	Creek flows year-round.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
Cedar Creek	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	152.4	-
<b>Total:</b>		<b>152.4</b>	<b>0</b>

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable

Provide estimates for jurisdictional waters in the review area:

Not Applicable

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Wetland Name	Flow	Explain
Forested Wetland	PERENNIAL	Creek flows year-round.

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
Forested Wetland	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	15175.71
<b>Total:</b>		<b>0</b>	<b>15175.71</b>

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable

**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:<sup>10</sup>**

Not Applicable

Identify water body and summarize rationale supporting determination:

Not Applicable

Provide estimates for jurisdictional waters in the review area:

Not Applicable

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS**

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):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:

Not Applicable

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.

Not Applicable

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD**

(listed items shall be included in case file and, where checked and requested, appropriately reference below)

Data Reviewed	Source Label	Source Description
--Corps navigable waters study	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
---USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s)	-	-
--National wetlands inventory map(s).	-	-
--Photographs	-	-
---Aerial	-	-
--Applicable/supporting case law	-	-
--Other information	-	-

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Description

Walked site during 06 Apr 12 site visit; noted wetland flagging as well. Creek braids through forested wetland and floodplain valley

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
4. Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the and 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
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 OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break
7. Ibid
8. See Footnote #3
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

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14-Mar-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2011-00839-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	IL - Illinois
County/parish/borough:	Cook
City:	Prospect Heights
Lat:	42.11286
Long:	-87.9226
Universal Transverse Mercator	Folder UTM List <u>UTM list determined by folder location</u> • NAD83 / UTM zone 16N Waters UTM List <u>UTM list determined by waters location</u>

Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW):

Name of watershed or Hydrologic Unit Code (HUC):

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 the action and are recorded on a different JD form

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 05-Apr-2012

Field Determination Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

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 "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:<sup>1</sup>

Water Name	Water Type(s) Present
Wetland #1	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

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

Area: (m<sup>2</sup>)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:<sup>3</sup>

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

1. TNW

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

(i) General Area Conditions:

Watershed size: 934048 acres

Drainage area: 836673 acres

Average annual rainfall: 36.27 inches

Average annual snowfall: 38 inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [ ] tributaries before entering TNW.

Number of tributaries

Project waters are 30 (or more) river miles from TNW.

Project waters are 30 (or more) river miles from RPW.

Project Waters are 30 (or more) aerial (straight) miles from TNW.

Project waters are 30 (or more) aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

The wetland drains during storm events via a ditch cut in upland soils, and then enters a constructed stormwater pond which outlets into a pipe to a Storm Sewer

Tributary Stream Order, if known:

Not Applicable.

(b) General Tributary Characteristics:

Tributary is:

Not Applicable.

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

Not Applicable.

Primary tributary substrate composition:

Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):

Not Applicable.

(c) Flow:

Not Applicable.

Surface Flow is:

Not Applicable.

Subsurface Flow:

Not Applicable.

Tributary has:

Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable.

Mean High Water Mark indicated by:

Not Applicable.

(iii) Chemical Characteristics:

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

Not Applicable.

(iv) Biological Characteristics. Channel supports:

Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
Wetland #1	1.77	Shrub & Emergent	Moderate	-

(b) General Flow Relationship with Non-TNW:

Flow is:

Wetland Name	Flow	Explain
Wetland #1	Intermittent flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
Wetland #1	Discrete and confined	Wetland drains via a ditch excavated in upland to drain the site.

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Wetland #1	Unknown	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Wetland #1	No	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Wetland #1	30 (or more)	30 (or more)	Wetland to navigable waters	50 - 100-year

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if known
Wetland #1	-	Unknown

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Wetland #1	-	-	-	-

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic/Wildlife Diversity	Explain Findings
Wetland #1	X	-	-	-	-	-	-	X	Some animals utilizing site.

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

All wetlands being considered in the cumulative analysis:  
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:  
Not Applicable.

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.

Findings for: Wetland #1

The wetland drains off-site into a storm sewer, which according to the USEPA Region 5 ultimately drains to the Des Plaines River. This surface water connection demonstrates the ability of the tributary to carry pollutants, flood waters, nutrients and organic carbon to the TNW. This wetland has the ability to reduce the amount of pollutants and floodwaters reaching the TNW. The headwater wetland is receiving a percentage of it's water from groundwater and from runoff from the surrounding uplands before it flows into Des Plaines River. Wetlands such as these provide stormwater storage, habitat, sediment/toxicant retention and nutrient removal/transformation. The decrease of sedimentation, pollutants, flooding, nutrients and habitat provided by the subject wetland provides a positive effect to the downstream relatively permanent waters and traditional navigable waters. The wetland alone, and in combination with other area wetlands, significantly affect the chemical, physical and biological integrity of the Des Plaines River. Stormwater storage provided by the subject wetlands affect the frequency and extent of downstream flooding, decreasing flood peaks in the Des Plaines River, and in turn impacting navigation and downstream bank erosion and sedimentation. The sediment and pollutant/toxicant retention provided by the subject wetland has a direct positive effect on the Des Plaines River in regards to navigation and aquatic food webs that are not adapted to thrive in sediment-choked environments. These factors contribute to the finding of a significant nexus between the on-site wetland and the TNW

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:<sup>9</sup>

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:  
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m <sup>2</sup> )
Wetland #1	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs	-	7162.93512
<b>Total:</b>		<b>0</b>	<b>7162.93512</b>

7. Impoundments of jurisdictional waters:<sup>9</sup>  
Not Applicable

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:<sup>10</sup>  
Not Applicable

Identify water body and summarize rationale supporting determination:  
Not Applicable.

Provide estimates for jurisdictional waters in the review area:  
Not Applicable.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS

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):

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:  
Not Applicable.

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.  
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below)

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	-	-
--U.S. Geological Survey Hydrologic Atlas	-	-
---USGS 8 and 12 digit HUC maps	-	-
--U.S. Geological Survey map(s).	-	-
--Photographs	-	-
---Aerial	-	-
---Other	-	-
--Applicable/supporting case law	-	-
--Other information	-	-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Description

Site visit on February 7, 2012 to document connection to storm sewer; as well as review by USEPA.

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

<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

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

<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

<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

<sup>8</sup> See Footnote #3

<sup>9</sup> To complete the analysis refer to the key in Section III D 6 or the Instructional Guidebook

<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 Memorandum Regarding CWA Act Jurisdiction Following Rapanos