SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 08-Dec-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00558-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

- State: IL - Illinois
- County/parish/borough: McHenry
- City: Spring Grove
- Lat: 42.42796830830185
- Long: -88.21000000000001
- Universal Transverse Mercator: Folder UTM List
  - UTM list determined by folder location
    - NAD83 / UTM zone 38S
  - Waters UTM List
    - UTM list determined by waters location
    - NAD83 / UTM zone 38S

- Name of nearest waterbody: Nippersink Creek
- Name of nearest Traditional Navigable Water (TNW): Fox River
- Name of watershed or Hydrologic Unit Code (HUC): Fox 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:

☐ 08-Dec-2008

Office Determination Date:

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:

      | Water Name | Water Type(s) Present |
      |------------|-----------------------|

https://orm.usace.army.mil/orm2/?p=106:34:1950471043808346::NO::

12/8/2008
b. Identify (estimate) size of waters of the U.S. in the review area:
   Area: \( (m^2) \)
   Linear: \( (m) \)

c. Limits (boundaries) of jurisdiction:
   based on: [ ]
   OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:\(^3\)
   Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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:
      \( \square \) Tributary flows directly into TNW.
      \( \square \) 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.
      \( \square \) Project waters cross or serve as state boundaries.
      Explain:
      Identify flow route to TNW:\(^5\)

   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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acres)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Cross or Serve as State Boundaries. Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558</td>
<td>246</td>
<td>Complex includes: a mid-order low gradient stream (Nippersink Creek), graminoid fen, sedge meadow, and streamside marsh</td>
<td>ADID FQI 20.4</td>
<td>-</td>
</tr>
</tbody>
</table>

(b) General Flow Relationship with Non-TNW:  
Flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558</td>
<td>Perennial flow.</td>
<td>-</td>
</tr>
</tbody>
</table>

Surface flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558</td>
<td>Discrete and confined</td>
<td>There are a few man made channels through wetland areas.</td>
</tr>
</tbody>
</table>

Subsurface flow:  

https://orm.usace.army.mil/orm2/?p=106:34:1950471043808346::NO::  
12/8/2008
<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Wetland Adjacency Determination with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Directly Abutting</th>
<th>Discrete Wetland Hydrologic Connection</th>
<th>Ecological Connection</th>
<th>Separated by Berm/Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>River Miles From TNW</th>
<th>Aerial Miles From TNW</th>
<th>Flow Direction</th>
<th>Within Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>1-2</td>
<td>1-2</td>
<td>Wetland to navigable waters</td>
<td>-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics, Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Riparian Buffer</th>
<th>Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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:
Not Applicable.

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12/8/2008
Provide estimates for jurisdictional waters in the review area:
Not Applicable.

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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>PERENNIAL</td>
<td>Nippersink Creek runs through the large wetland complex.</td>
</tr>
</tbody>
</table>

Provide acreage estimates for jurisdictional wetlands in the review area:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) (m)</th>
<th>Size (Area) (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-558 Wetland 1</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>995526.576</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>0</td>
<td>995526.576</td>
</tr>
</tbody>
</table>

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:*
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:*
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):

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12/8/2008
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):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Figure 2</td>
<td>National Wetland Inventory Map</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Figure 5</td>
<td>Hydrologic Atlas</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Figure 7</td>
<td>Aerial Photo with Wetland Boundary</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Figure 3</td>
<td>McHenry ADID Wetland Map</td>
</tr>
<tr>
<td>-Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Figure 6</td>
<td>NRCS Soil Survey Map</td>
</tr>
</tbody>
</table>

**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.
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): September 12, 2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, DuPage River Park Trail, LPA-2008-523

C. PROJECT LOCATION AND BACKGROUND INFORMATION: DuPage River Park
   State: Illinois  County/parish/borough: Will  City: Naperville
   Center coordinates of site (lat/long in degree decimal format): Lat. 41.4249°N, Long. 88.0762° W.
   Universal Transverse Mercator (UTM): Des Plaines River
   Name of nearest waterbody: East Branch of the DuPage River
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Des Plaines River
   Name of watershed or Hydrologic Unit Code (HUC): Des Plaines (07120004)
   [ ] 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: 7/21/2008
   [ ] Field Determination. Date(s): 7/22/2008, 7/30/2008, 8/8/2008

SECTION II: SUMMARY OF FINDINGS
A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are “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 to use for transport interstate or foreign commerce.

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): 
      [ ] TNWs, including territorial seas
      [ ] Wetlands adjacent to TNWs
      [ ] Relatively permanent waters (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: 8,670 linear feet. 30 width (ft) and/or acres. Wetlands: 62 acres.

   c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
      Elevation of established OHWM (if known): unknown.

2. Non-regulated waters/wetlands (check if applicable): 
   [ ] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
      Explain: 

   1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
   2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
   3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1; 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.


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 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:

           Tributary stream order, if known:

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

2 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):
- [ ] Silts
- [ ] Sands
- [ ] Gravel
- [ ] Vegetation. Type: % cover:
- [ ] Muck
- [ ] 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):
- [ ] Bed and banks
- [ ] OHWM\(^6\) (check all indicators that apply):
  - [ ] clear, natural line impressed on the bank
  - [ ] changes in the character of soil
  - [ ] shelving
  - [ ] vegetation matted down, bent, or absent
  - [ ] leaf litter disturbed or washed away
  - [ ] sediment deposition
  - [ ] water staining
  - [ ] other (list):
  - [ ] the presence of litter and debris
  - [ ] destruction of terrestrial vegetation
  - [ ] the presence of wrack line
  - [ ] sediment sorting
  - [ ] scour
  - [ ] multiple observed or predicted flow events
  - [ ] abrupt change in plant community
  - [ ] Discontinuous OHWM.\(^7\) Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- [ ] High Tide Line indicated by:
  - [ ] oil or scum line along shore objects
  - [ ] fine shell or debris deposits (foreshore)
  - [ ] physical markings CHARACTERISTICS
  - [ ] tidal gauges
  - [ ] other (list):
- [ ] Mean High Water Mark indicated by:
  - [ ] survey to available datum;
  - [ ] physical markings;
  - [ ] vegetation line changes in vegetation types.

(iii) Chemical Characteristics:

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

Explain:

Identify specific pollutants, if known:

\(^6\)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.
(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): .
- 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: 62 acres
     - Wetland type. Explain: Fresh wet meadow/wet to wet-mesic lowland hardwoods, fresh wet meadow/shallow marsh/wet to wet-mesic lowland hardwoods, deciduous scrub-shrub/wet to wet-mesic low land hardwoods, fresh wet meadow/floodplain hardwood forest.
     - Wetland quality. Explain: Low to Moderate Vegetative Quality (FQI ranges from 13.57 to 21.00).
     - Project wetlands cross or serve as state boundaries. Explain: Not Applicable.

   (b) **General Flow Relationship with Non-TNW:**
   - Flow is: **Perennial flow.** Explain: Wetlands drain to East Branch of the DuPage River, flows to Des Plaines River.
   - Surface flow is: **Discrete and confined**
     - Characteristics: Recharges groundwater, collects in ponds, concentrated channels to river, and sheet flow.
     - Subsurface flow: **Unknown.** Explain findings:
     - Dye (or other) test performed: .

   (c) **Wetland Adjacency Determination with Non-TNW:**
     - Directly abutting
     - Not directly abutting
     - Discrete wetland hydrologic connection. Explain: .
     - Separated by berm/barrier. Explain: .

   (d) **Proximity (Relationship) to TNW:**
     - Project wetlands are 10-15 river miles from TNW.
     - Project waters are 5-10 aerial (straight) miles from TNW.
     - Flow is from: **Wetland to from navigable waters.**
     - Estimate approximate location of wetland as within the 2-year or less floodplain.

(ii) **Chemical Characteristics:**

   - Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics, etc.). Explain: Pond water is clear. River water is brown.
   - Identify specific pollutants, if known: Unknown.

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

   - Riparian buffer. Characteristics (type, average width): 100 feet.
   - Vegetation type/percent cover. Explain: Fresh wet meadow/wet to wet-mesic lowland hardwoods, fresh wet meadow/shallow marsh/wet to wet-mesic lowland hardwoods, deciduous scrub-shrub/wet to wet-mesic low land hardwoods, fresh wet meadow/floodplain hardwood forest.

   - 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:

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
</table>

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: Daily discharge of East Branch of the DuPage River ranges from 35 to 800 cfs. The daily gage height ranges from 14.7 to 19.5 feet. USGS gage data attached (September 2007-August 2008).
   - [ ] 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 water: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: 

3. Non-RPWs\(^5\) 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 are located in the floodplain of the East Branch of the DuPage River. Wetland Delineation Report showing wetland boundaries and proximity to the River is enclosed. A Surveyed Wetlands Boundary and Conceptual Master Plan exhibit is enclosed.
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

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

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

7. Impoundments of jurisdictional waters.\(^9\)
- As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
- Demonstrate that impoundment was created from “waters of the U.S.” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):\(^10\)

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain: 

Identify water body and summarize rationale supporting determination: 

\(^5\)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 section 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: Surveyed Wetland Boundary and Conceptual Master Plan.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concur with data sheets/delineation report.
- Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters’ study: .
- USGS NHD data: .
- USGS 8 and 12 digit HUC maps: .
- National wetlands inventory map(s). Cite name: US Fish & Wildlife Service–Wetlands Online Mapper.
- State/Local wetland inventory map(s): Pick List Pick List.
- FEMA/FIRM maps: FIRM Map Numbers 1702130022C, 1702130023C.
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Will County Aerial Photograph, 2002.
- or Other (Name & Date): Site Photographs, 8/20/2008.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting scientific literature: .
- Other information (please specify): USGS streamgage data (September 2007-August 2008).

B. ADDITIONAL COMMENTS TO SUPPORT JD: .
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): 5/12/2008
B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Silver Glen Bridge, LRC-2007-810
C. PROJECT LOCATION AND BACKGROUND INFORMATION: Silver Glen Road over a Tributary to Otter Creek
   State: Illinois   County/parish/borough: Kane   City: St. Charles Township
   Center coordinates of site (lat/long in degree decimal format): Lat. 41.97016°N, Long. 88.36107°W.
   Universal Transverse Mercator: NAD 83
   Name of nearest waterbody: Unnamed Tributary to Otter Creek
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yes
   Name of watershed or Hydrologic Unit Code (HUC): 1007022100006
   ☒ 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: 5/12/2008
   ☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS
A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
   There are “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): 1
      ☒ TNWs, including territorial seas
      ☒ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters of (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: linear feet: width (ft) and/or 0.14 acres.
      Wetlands: 0.23 acres.

   c. Limits (boundaries) of jurisdiction based on: Delineation
      Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable): 3
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

---

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
   Identify TNW:

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 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: 
   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.

   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:
   Tributary stream order, if known:

---

4 Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the aid of the 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.
(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: _______.

Primary tributary substrate composition (check all that apply):
- [ ] Silts
- [ ] Sands
- [ ] Concrete
- [ ] Cobble
- [ ] Gravel
- [ ] Muck
- [ ] Bedrock
- [ ] Vegetation. Type/cover:
- [ ] Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: _______
Tributary gradient (approximate average slope): _______

(c) Flow:

Tributary provides for: _______
Estimate average number of flow events in review area/year: _______
Describe flow regime:
Other information on duration and volume:

Surface flow is: _______. Characteristics:
Subsurface flow: _______. Explain findings:
- [ ] Dye (or other) test performed:

Tributary has (check all that apply):
- [ ] Bed and banks
- [ ] OHWM\(^6\) (check all indicators that apply):
  - [ ] clear, natural line impressed on the bank
  - [ ] changes in the character of soil
  - [ ] shelving
  - [ ] vegetation matted down, bent, or absent
  - [ ] leaf litter disturbed or washed away
  - [ ] sediment deposition
  - [ ] water staining
  - [ ] other (list):

- [ ] Discontinuous OHWM.\(^7\) Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- [ ] High Tide Line indicated by:
- [ ] Mean High Water Mark indicated by:
  - [ ] oil or scum line along shore objects
  - [ ] fine shell or debris deposits (foreshore)
  - [ ] physical markings
  - [ ] 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:

\(^6\) 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.
(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: Explain:
   Surface flow is: Explain:
   Characteristics:
   Subsurface flow: 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 river miles from TNW.
Project waters are aerial (straight) miles from TNW.
Flow is from:
Estimate approximate location of wetland as within the 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:
   **Approximately** ( ) acres in total are being considered in the cumulative analysis.
For each wetland, specify the following:

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
</table>

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 floodwaters to TNWs, or to reduce the amount of pollutants or floodwaters 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: The Tributary to Otter Creek is perennial, and has a bridge over it.
   - 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: 500 linear feet 10 width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs** 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: **The Tributary is perennial.**
   ☒ 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: 0.23 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.**
   ☐ 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):**

☐ 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: .

---

5 See Footnote # 3.
6 To complete the analysis refer to the key in Section III D.6 of the Instructual 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/EPAA 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: CBBCWEL Wetland Assessment dated 11/26/2007.
- 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:
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Scott County, Illino, 1981.
- National wetlands inventory map(s). Cite name: Geneva.
- State/Local wetland inventory map(s): Sten's Survey, Unit: SCS Swampbuster Unit.
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):
- or Other (Name & Date):
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting scientific literature:
- Other information (please specify): GPS Survey by CBBCWEL.

B. ADDITIONAL COMMENTS TO SUPPORT JD: The jurisdictional area includes the Tributary to Otter Creek (Waters 1), the fringe wetlands to the tributary, and Wetland 1, which directly abuts the tributary.
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14-Oct-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00563-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: Kane
City: Campton Hills
Lat: 41.930257713534395
Long: -88.3836777174857
Universal Transverse Mercator

Folder UTM List
UTM list determined by folder location
NAD83 / UTM zone 37S

Waters UTM List
UTM list determined by waters location
NAD83 / UTM zone 37S

Name of nearest waterbody: Ferson Creek
Name of nearest Traditional Navigable Water (TNW): Fox River
Name of watershed or Hydrologic Unit Code (HUC): 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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 02-Dec-2008

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:

<table>
<thead>
<tr>
<th>Water Name</th>
<th>Water Type(s) Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs</td>
</tr>
</tbody>
</table>

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

   Area: (m²)
   Linear: (m)

c. Limits (boundaries) of jurisdiction:

   based on: [ ]
   OHWM Elevation: (If known)

2. Non-regulated waters/wetlands:

   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: 712629 acres
Drainage area: 220721 acres
Average annual rainfall: 36.94 inches
Average annual snowfall: 33.5 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 2-5 river miles from TNW.
   Project waters are 1-2 river miles from RPW.
   Project Waters are 2-5 aerial (straight) miles from TNW.
   Project waters are 1-2 aerial(straight) miles from RPW.

   Project waters cross or serve as state boundaries.
   Explain:
   Identify flow route to TNW:\(^5\)
   Tributary to Ferson Creek to the Fox River.

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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acres)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Cross or Serve as State Boundaries. Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>.13</td>
<td>Emergent</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

(b) General Flow Relationship with Non-TNW:
Flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Intermittent flow.</td>
<td></td>
</tr>
</tbody>
</table>

Surface flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>From</th>
<th>Wetland Hydrologic Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Discrete</td>
<td>Water flows discretely and a narrow channel starts to form; once out of the wetland, the channel is more defined.</td>
</tr>
</tbody>
</table>

Subsurface flow:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Did for others Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Wetland Adjacency Determination with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Directly Abutting</th>
<th>Discrete Wetland Hydrologic Connection</th>
<th>Ecological Connection</th>
<th>Separated by Berm/Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>River Miles From TNW</th>
<th>Aerial Miles From TNW</th>
<th>Flow Direction</th>
<th>Within Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>2-5</td>
<td>1-2</td>
<td>Wetland to navigable waters</td>
<td>50 - 100-year</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics. Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Riparian Buffer</th>
<th>Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Habitat for:

Other:

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: LRC-2008-563 WL3
This headwater wetland complex is adjacent and contiguous to the tributary to Ferson Creek, which has intermittent to seasonal flow, and exhibits a surface water connection to a relatively permanent water that drains to a traditional navigable waterway. This surface water connection demonstrates the ability of the tributary to carry pollutants, flood waters, nutrients and organic carbon to the TNW. The adjacent wetlands have the ability to reduce the amount of pollutants and floodwaters reaching the TNW. The headwater wetland is receiving a percentage of its water from groundwater and from runoff from the surrounding uplands before it flows into Fox 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 Fox River. Stormwater storage provided by the subject wetlans affect the frequency and extent of downstream flooding, decreasing flood peaks in the Fox 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 Fox 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:
   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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) (m)</th>
<th>Size (Area) (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-563 WL3</td>
<td>Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>526.09128</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>0</td>
<td>526.09128</td>
</tr>
</tbody>
</table>

7. Impoundments of jurisdictional waters:
   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:¹⁰
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):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
</table>

https://orm.usace.army.mil/orm2/?p=106:34:828994204201008::NO::

12/2/2008
B. ADDITIONAL COMMENTS TO SUPPORT JD:

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This wetland is part of a larger headwater wetland complex that a tributary forms inside of and flows to an RPW, which flows to a TNW.</td>
</tr>
</tbody>
</table>

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.
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 06-Mar-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00110-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: Kane
City: Elburn
Lat: 41.89704836943947
Long: -88.45595162941419
Universal Transverse Mercator Folder UTM List
UTM list determined by folder location
NAD83 / UTM zone 37S
Waters UTM List
UTM list determined by waters location
NAD83 / UTM zone 37S

Name of nearest waterbody: Blackberry Creek
Name of nearest Traditional Navigable Water (TNW): Fox River
Name of watershed or Hydrologic Unit Code (HUC): 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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 02-Dec-2008
Field Determination Date(s): 15-Aug-2008
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:¹

<table>
<thead>
<tr>
<th>Water Name</th>
<th>Water Type(s) Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TNWs</td>
</tr>
</tbody>
</table>

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Area: (m²)
      Linear: (m)

   c. Limits (boundaries) of jurisdiction:
      based on: [ ]
      OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³

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

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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.5

   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:**

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acres)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Cross or Serve as State Boundaries. Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>.01</td>
<td>Riparian</td>
<td>Low</td>
<td>-</td>
</tr>
</tbody>
</table>
(b) General Flow Relationship with Non-TNW:
Flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Perennial</td>
<td>-</td>
</tr>
</tbody>
</table>

Surface flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Characterization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Discrete and confined</td>
<td>Shallow open channel with reed canary grass.</td>
</tr>
</tbody>
</table>

Subsurface flow:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye for other Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Wetland Adjacency Determination with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Directly Abutting</th>
<th>Discrete Wetland Hydrologic Connection</th>
<th>Ecological Connection</th>
<th>Separated by Berm-Banner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>River Miles From TNW</th>
<th>Aerial Miles From TNW</th>
<th>Flow Direction</th>
<th>Within Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>30 (or more)</td>
<td>30 (or more)</td>
<td>Wetland to navigable waters</td>
<td>2-year or less</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>-</td>
<td>Farm sediment, pesticides and fertilizers.</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics. Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Riparian Buffer</th>
<th>Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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:
   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.

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>PERENNIAL</td>
<td>The subject section of Blackberry Creek flows year round.</td>
</tr>
</tbody>
</table>

Provide acreage estimates for jurisdictional wetlands in the review area:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) [m]</th>
<th>Size (Area) [m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 3</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>40.46856</td>
</tr>
</tbody>
</table>
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:
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:
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):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>Delineation Report</td>
<td>Hey and Associates, Inc. January 16, 2008 Wetland Delineation Report</td>
</tr>
<tr>
<td>--Data sheets prepared/submitted by or on behalf of the applicant/consultant</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>----Office concurs with data sheets/delineation report</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--U.S. Geological Survey Hydrologic Atlas</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--U.S. Geological Survey map(s).</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--USDA Natural Resources Conservation Service Soil Survey.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--National wetlands inventory map(s).</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--State/Local wetland inventory map(s):</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--FEMA/FIRM maps</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--Photographs</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>----Aerial</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--Applicable/supporting case law</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--Other information</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

B. ADDITIONAL COMMENTS TO SUPPORT JD:

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site visit by Kim Kubiak on 15 Aug 2008 confirmed connection to creek.</td>
</tr>
</tbody>
</table>

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.
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 16-Jun-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00302-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: Kane
City: Elgin
Lat: 42.02231502271767
Long: -88.3410969304199
Universal Transverse Mercator

Folder UTM List
UTM list determined by folder location
NAD83 / UTM zone 38S
Waters UTM List
UTM list determined by waters location
NAD83 / UTM zone 38N

Name of nearest waterbody: Otter Creek
Name of nearest Traditional Navigable Water (TNW): Fox River
Name of watershed or Hydrologic Unit Code (HUC): 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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

08-Dec-2008

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:¹

<table>
<thead>
<tr>
<th>Water Name</th>
<th>Water Type(s) Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TNWs</td>
</tr>
</tbody>
</table>

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Area: (m²)
      Linear: (m)

   c. Limits (boundaries) of jurisdiction:
      based on: [ ]
      OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:³
   Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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.\(^5\)

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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acres)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Closest Surveyor State Boundary Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>5</td>
<td>Forested, shrub and emergent.</td>
<td>Low-Moderate</td>
<td>-</td>
</tr>
</tbody>
</table>

(b) General Flow Relationship with Non-TNW:
Flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>Perennial flow.</td>
</tr>
</tbody>
</table>

Surface flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>Overland sheetflow</td>
<td>Water flows through wetland to creek during normal circumstances; and is inundated by creek during flood events.</td>
</tr>
</tbody>
</table>

Subsurface flow:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Wetland Adjacency Determination with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Directly Abutting</th>
<th>Discrete Wetland Hydrologic Connection</th>
<th>Ecological Connection</th>
<th>Separated by Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>River Miles From TNW</th>
<th>Aerial Miles From TNW</th>
<th>Flow Direction</th>
<th>Within Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>5-10</td>
<td>2-5</td>
<td>Wetland to navigable waters</td>
<td>50 - 100-year</td>
</tr>
</tbody>
</table>
(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

<table>
<thead>
<tr>
<th>Location Name</th>
<th>Buffer</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>-</td>
<td>Sediment, road salt.</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics. Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Buffer</th>
<th>Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2008-302 Area 1</td>
<td>X</td>
<td>Varies from 10-100+ feet.</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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:
SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20-Oct-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2008-00574-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: McHenry
City: Lakemoor
Lat: 42.33297714801556
Long: -88.21302941449761
Universal Transverse Mercator: Folder UTM List

UTM list determined by folder location
NAD83 / UTM zone 38S

Waters UTM List
UTM list determined by waters location
NAD83 / UTM zone 38S

Name of nearest waterbody: Lily Lake Drain
Name of nearest Traditional Navigable Water (TNW): Fox River
Name of watershed or Hydrologic Unit Code (HUC): 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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 14-Nov-2008
Field Determination Date(s): 05-Nov-2008
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:

<table>
<thead>
<tr>
<th>Water Name</th>
<th>Water Type(s) Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs</td>
</tr>
</tbody>
</table>

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

   Area: (m²)
   Linear: (m)

   c. Limits (boundaries) of jurisdiction:

      based on: [ ]
      OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:

   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: 1008237 acres
Drainage area: 393887 acres
Average annual rainfall: 36 inches
Average annual snowfall: 35.8 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 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.5
Wetland drains via Lily Lake Drain to Fox River Chain-O-Lakes ecosystem.

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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acres)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Cross or Serve as State Boundaries</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>1</td>
<td>Mixed open water with forested fringe.</td>
<td>Medium</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

https://orm.usace.army.mil/orm2/?p=106:34:2245824321940254::NO::APP_FORM_ID:13080  

11/14/2008
(b) General Flow Relationship with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Intermittent flow.</td>
<td></td>
</tr>
</tbody>
</table>

Surface flow is:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Discrete and confined</td>
<td>Water flows during rain events as this wetland serves as a natural stormwater retention area.</td>
</tr>
</tbody>
</table>

Subsurface flow:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Wetland Adjacency Determination with Non-TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Directly Abutting</th>
<th>Discrete Wetland Hydrologic Connection</th>
<th>Ecological Connection</th>
<th>Separated by Berm/Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>River Miles From TNW</th>
<th>Aerial Miles From TNW</th>
<th>Flow Direction</th>
<th>Within Floodplain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>2-5</td>
<td>2-5</td>
<td>Wetland to navigable waters</td>
<td>50 - 100-year</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>-</td>
<td>Road salt, sediment.</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics. Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Riparian Buffer</th>
<th>Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Habitat for:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Habitat</th>
<th>Federally Listed Species</th>
<th>Explain Findings</th>
<th>Spawn Area</th>
<th>Explain Findings</th>
<th>Other Environmentally</th>
<th>Explain Findings</th>
<th>Aquatic/Wildlife Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
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 A
The wetland is adjacent and contiguous to Lily Lake Drain, which has seasonal relative permanent flow, and exhibits a surface water connection to a traditional navigable waterway. This surface water connection demonstrates the ability of the tributary to carry pollutants, flood waters, nutrients and organic carbon to the TNW. The adjacent wetlands have the ability to reduce the amount of pollutants and floodwaters reaching the TNW. The headwater wetland is receiving a percentage of its water from groundwater and from runoff from the surrounding uplands before it flows into Fox River Chain-O-Lakes ecosystem. 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 Fox River Chain-O-Lakes ecosystem. Stormwater storage provided by the subject wetlands affect the frequency and extent of downstream flooding, decreasing flood peaks in the Fox River Chain-O-Lakes ecosystem, 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 Fox River Chain-O-Lakes ecosystem 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:8
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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Type</th>
<th>Size (Linear) (m)</th>
<th>Size (Area) (m^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland A</td>
<td>Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs</td>
<td>-</td>
<td>4046.856</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>0</td>
<td>4046.856</td>
</tr>
</tbody>
</table>

7. Impoundments of jurisdictional waters:9
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:10
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 soley 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):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--Data sheets prepared by the Corps</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--U.S. Geological Survey Hydrologic Atlas</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--U.S. Geological Survey map(s)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--USDA Natural Resources Conservation Service Soil Survey</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
B. ADDITIONAL COMMENTS TO SUPPORT JD:

Description

Prior involvement with the subject wetland, as well as the drainage in the area through multiple other cases. Wetland elevation has been the same in the 10 plus years of observation; and flow observed in the past.

---

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

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): December 2007

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Burlington Creek (Kishwaukee River Watershed)

C. PROJECT LOCATION AND BACKGROUND INFORMATION: Burlington Creek within the Chicago District, USACE

State: Illinois
County/parish/borough: Kane
City: Burlington

Center coordinates of site (lat/long in degree decimal format): Lat. 42.06053°N, Long. 88.52691° W.
Universal Transverse Mercator. NAD 83

Name of nearest waterbody: Burlington Creek (Kishwaukee River Watershed)

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

Name of watershed or Hydrologic Unit Code (HUC): Kishwaukee (07090006)

☐ 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: December 2007

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.


B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are “waters of the U.S.” within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.
   a. Indicate presence of waters of U.S. in review area (check all that apply): 1
      ☒ TNWs, including territorial seas
      ☒ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters (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: 1,450 linear feet: 30 width (ft) and/or 2.52 acres.
      Wetlands: 2.52 acres.

   c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
      Elevation of established OHWM (if known): 891.1 plus/minus.

2. Non-regulated waters/wetlands (check if applicable): 2
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain:

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1.; 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**.
   

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 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: 2.069 square miles
   Drainage area: 2.069 square miles
   Average annual rainfall: 36 inches
   Average annual snowfall: 37 inches

   (ii) **Physical Characteristics:**
   
   (a) **Relationship with TNW:**
   - Tributary flows directly into TNW.
   - Tributary flows through 3 tributaries before entering TNW.
   
   Project waters are 30 (or more) river miles from TNW.
   Project waters are 1 (or less) river miles from RPW.
   Project waters are 30 (or more) 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:
   - Unnamed Trib. to Burlington Creek to Coon Creek to Kishwaukee River to Rock River. Tributary stream order, if known: 0.

---

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

2 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:

**Tributary properties with respect to top of bank (estimate):**
- Average width: 40 feet
- Average depth: 5 feet
- Average side slopes: 3:1

**Primary tributary substrate composition (check all that apply):**
- [x] Silts
- [x] Sands
- [ ] Gravels
- [ ] Cobble
- [ ] Bedrock
- [ ] Vegetation. Type/cover:
- [ ] Concrete
- [ ] Muck
- [ ] Other. Explain:

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

**Presence of run/riffle/pool complexes.** Explain: Not present.

**Tributary geometry:** **Relatively straight**

**Tributary gradient (approximate average slope):** 0.5%

(c) **Flow:**

**Tributary provides for:** **Seasonal flow**

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

Describe flow regime: Steady, within banks.

Other information on duration and volume: Agricultural tiles provide baseflow except during drought periods.

Surface flow is: **Confined.** Characteristics: Within banks.

Subsurface flow: **Unknown.** Explain findings:
- [ ] Dye (or other) test performed:

**Tributary has (check all that apply):**
- [x] Bed and banks
- [x] OHWM 
- [ ] clear, natural line impressed on the bank
- [x] changes in the character of soil
- [ ] shelving
- [ ] vegetation matted down, bent, or absent
- [ ] leaf litter disturbed or washed away
- [ ] sediment deposition
- [ ] water staining
- [ ] other (list):
- [ ] Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- [ ] High Tide Line indicated by:
  - [ ] oil or scum line along shore objects
  - [ ] fine shell or debris deposits (foreshore)
  - [ ] physical markings/characteristics
  - [ ] tidal gauges
  - [ ] other (list):
- [ ] Mean High Water Mark indicated by:
  - [ ] survey to available datum;
  - [ ] physical markings;
  - [ ] vegetation lines/changes in vegetation types.

(iii) **Chemical Characteristics:**

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

Explain: Clear, seasonal peaks in nitrogen/phosphorous due to agricultural use.

Identify specific pollutants, if known: nitrogen/phosphorous likely.

---

1 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.

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

- Riparian corridor. Characteristics (type, average width):  
- Wetland fringe. Characteristics: From OHWM to top of bank.
- 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: 2.52 acres
- Wetland type. Explain: Primarily Reed Canary Grass.
- Wetland quality. Explain: Poor, IQR range from 2.2 to 6.5.
- Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent flow. Explain: Upstream drain tile system provides baseflow most of the year, however periods of no flow occur.

- Surface flow is: Confined
  - Characteristics: Within banks.

- Subsurface flow: No. 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 30 (or more) river miles from TNW.
- Project waters are 30 (or more) aerial (straight) miles from TNW.
- Flow is from: Wetland to navigable waters.

- Estimate approximate location of wetland as within the 50 - 100-year 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: Clear, seasonal peaks in nitrogen/phosphorous due to agricultural use. Identify specific pollutants, if known: nitrogen/phosphorous likely.

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: Primarily Reed Canary Grass/100 cover above OHWM.
- 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: 1

Approximately (2.52) acres in total are being considered in the cumulative analysis.
For each wetland, specify the following:

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1-6</td>
<td>Y</td>
<td>2.52</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summarize overall biological, chemical and physical functions being performed: Negligible.

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

- Tributary waters: 1,450 linear feet 30 width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

3. **Non-RPWs** 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 abutting an 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: Within the banks of the RPW.

Provide acreage estimates for jurisdictional wetlands in the review area: 2.52 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.**
   - 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):**
   - 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: .

---

*See Footnote # 3.
*To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
*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 - checked items shall be included in case file and, where checked and requested, appropriately referenced sources below):
- Maps, plans, plots or plat 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: ___.
- USGS NHD data: ___.
- USGS 8 and 12 digit HUC maps: ___.
- U.S. Geological Survey map(s): Cite scale & quad name: 1" = 1000', Hampshire Quadrangle.
- National wetlands inventory map(s): Cite name: U.S. Fish and Wildlife (Digital Data).
- State/Local wetland inventory map(s): Kane County ADID, Kane County Fen Study.
- FEMA/FIRM maps: 17089C0125F.
- 100-year Floodplain Elevation is: 892.7 plus/minus (National Geodetic Vertical Datum of 1929).
- Photographs: Aerial (Name & Date): Kane County 2002 (b/w), USGS 2005 Urban Areas (color).
- or Other (Name & Date): ___.
- Previous determination(s): File no. and date of response letter: ___.
- Applicable/supporting scientific literature: ___.
- Other information (please specify): ___.

B. ADDITIONAL COMMENTS TO SUPPORT JD: ___.
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): December 10, 2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2007-650

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Illinois County/parish/borough: Cook City: Wheeling
Center coordinates of site (lat/long in degree decimal format): Lat. 42.146°N, Long. -87.946°W.
Universal Transverse Mercator: NAD 83
Name of nearest waterbody: Buffalo Creek/Wheeling Drainage Ditch
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Des Plaines River
Name of watershed or Hydrologic Unit Code (HUC): Des Plaines (07129004)
☑ 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:
☐ 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): 1
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Non-wetland waters: 2,900 linear feet: 15 width (ft) and/or acres.
      Wetlands: acres.

   c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual
      Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable): 3
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain:

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least “seasonally” (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.
SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1; otherwise, see Section III.B below.

1. TNW
   Identify TNW: _Pick List_.


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 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: __ square miles
      Drainage area: __ square miles
      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:
         _Pick List_.
         Tributary stream order, if known:

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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.
(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: 2:1

**Primary tributary substrate composition (check all that apply):**
- Silts
- Sand
- Gravel
- Bedrock
- Vegetation. Type/ % cover:
- 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: 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):**
- Bed and banks
- OHWM* (check all indicators that apply):
  - clear, natural line impressed on the bank
  - changes in the character of soil
  - shelving
  - vegetation matted down, bent, or absent
  - leaf litter disturbed or washed away
  - sediment deposition
  - water staining
  - other (list):
- Discontinuous OHWM. Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
- High Tide Line indicated by:
- Mean High Water Mark indicated by:
  - oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gauges
  - 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:

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*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.

*bid.
(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:

<table>
<thead>
<tr>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
<th>Name/ID</th>
<th>Directly abuts? (Y/N)</th>
<th>Size (in acres)</th>
</tr>
</thead>
</table>

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 RFW but that do not directly abut the RFW. 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: Buffalo Creek/Wheeling Drainage Ditch is recipient of surface runoff and groundwater discharge within a relatively large watershed. Several small lakes are tributary to the creek that discharge into the waterway year round. The creek has a continuous defined bed and bank and aquatic organisms throughout.  
   - 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:  

5
Provide estimates for jurisdictional waters in the review area (check all that apply):
- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
  Identify type(s) of waters: .

3. Non-RPWs\(^8\) that flow directly or indirectly into TNWs.
- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
  Provide estimates for jurisdictional waters within the review area (check all that apply):
  - Tributary waters: linear feet width (ft).
  - Other non-wetland waters: acres.
  Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
  - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
  - Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
  Provide acreage estimates for jurisdictional wetlands in the review area: 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 and 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.\(^9\)
  As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
  - Demonstrate that impoundment was created from "waters of the U.S.," or
  - Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
  - Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):\(^{10}\)
- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

\(^8\)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.
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):

- [x] Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant; Wetland Assessment Report.
- [x] 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: .
- [ ] USGS NHD data.
- [ ] USGS 8 and 12 digit HUC maps.
- [ ] National wetlands inventory map(s). Cite name: Wheeling.
- [ ] State/Local wetland inventory map(s): Pick List, Pick List, .
- [ ] FEMA/FIRM maps: .
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): April 2006.
  - or [ ] Other (Name & Date): .
- [ ] Previous determination(s). File no. and date of response letter: .
- [ ] Applicable/supporting scientific literature: .
- [ ] Other information (please specify): .
APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 11, 2008
B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Lake Michigan, LRC-2007-333
C. PROJECT LOCATION AND BACKGROUND INFORMATION: Lake Michigan within the Chicago District
   State: Illinois  County: Cook, Lake  City: Multiple
   Center coordinates of site (lat/long in degree decimal format): Lat. 41.7645358 N, Long. 87.8432084 W.
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Michigan
   Name of watershed or Hydrologic Unit Code (HUC): Pike-Roof (04040002), Chicago (07120003), Little Calumet-Galien (04040001).
   Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

D. REVIEW PERFORMED FOR SITE EVALUATION: Office (Desk) Determination. Date: 1/16/2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
   There are “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 are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
   Explain: Lake Michigan was historically and is currently used for interstate and foreign commerce and recreation.

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.
   1. Waters of the U.S.
      a. Indicate presence of waters of U.S. in review area: ☒ TNWs, including territorial seas
      b. Identify (estimate) size of waters of the U.S. in the review area:
         Non-wetland waters: 453200 linear feet, width (ft) and/or acres.
      c. Limits (boundaries) of jurisdiction based on: Established by OHWM.
         Elevation of established OHWM (if known):

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: Lake Michigan.
      Summarize rationale supporting determination: Lake Michigan was historically and is currently used for commercial transportation. Early records from the 1670s until the 1760s the king and government of France licensed merchants of the fur trade with the Native American people living on and around Lake Michigan. Beginning in the 1760s the British government controlled trade with the Native Americans, and after 1815 a portion was controlled by the US government.

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: 453200 linear feet, width (ft), Or, 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: See Below.
   ☐ Corps navigable waters' study:
   ☐ U.S. Geological Survey Hydrologic Atlas:
   ☐ USGS 8 and 12 digit HUC maps.
   ☐ U.S. Geological Survey map(s). Cite scale & quad name: Multiple 7.5" quads.
   ☐ FEMA/FIRM maps:
   ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
   ☐ Photographs: ☐ Aerial (Name & Date): , or ☐ Other (Name & Date):
   ☒ Previous determination(s). File no. and date of response letter: multiple.
   ☐ Applicable/supporting case law: