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

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 07-Jul-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2010-00240-JD2

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: McHenry
City: McHenry
Lat: 42.39857
Long: -88.20925

Universal Transverse Mercator

Folder UTM List
UTM list determined by folder location

Waters UTM List
UTM list determined by waters location

NAD83 / UTM zone 10N

Name of nearest waterbody:

Name of nearest Traditional Navigable Water (TNW):

Name of watershed or Hydrologic Unit Code (HUC):

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 28-Jul-2010
Field Determination Date(s): 26-Jul-2010

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>Forested Wetland</td>
<td>Wetlands adjacent to TNWs</td>
</tr>
</tbody>
</table>

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

Area: 1000 (m²)
Linear: (m)

c. Limits (boundaries) of jurisdiction:
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

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Summarize rationale supporting conclusion that wetland is &quot;adjacent&quot;:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forested Wetland</td>
<td>Wetland directly abuts TNW.</td>
</tr>
</tbody>
</table>

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:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHiWM 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:
Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

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

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

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

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

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

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

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

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW.
For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g., between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

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

1. TNWs and Adjacent Wetlands:

<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>Forested Wetland</td>
<td>Wetlands adjacent to TNWs</td>
<td>-</td>
<td>1011.714</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>0</td>
<td>1011.714</td>
</tr>
</tbody>
</table>

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:
Not Applicable.

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 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>Data sheets prepared by the Corps</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Corps navigable waters study</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>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>Other</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:

Description

Site visit on July 26, 2010 to confirm presence of wetland (filled).

1. Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2. For purposes of this form, an RFW 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): 21-Jul-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District: LRC-2010-00372-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
   - State: IL - Illinois
   - County/parish/borough: Cook
   - City: Richton Park
   - Lat.: 41.4711
   - Long.: -87.70443
   - Universal Transverse Mercator (UTM) List:
     - UTM easting/determined by folder location: 612463
     - UTM northing/determined by folder location: 4726303
     - UTM easting/determined by waters location: 612463
     - UTM northing/determined by waters location: 4726303

   - Name of nearest waterbody: Thom Creek
   - Name of nearest Traditional Navigable Water (TNW): Calumet River
   - Name of watershed or Hydrologic Unit Code (HUC): 071200030305

   - Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

D. REVIEW PERFORMED FOR SITE EVALUATION:
   - Office Determination Date: 21-Jul-2010
   - Field Determination Date(s): 02-Jul-2010

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION
   There [ ] navigable waters of the U.S. (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.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
   There [ ] waters of the U.S. (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 Types Present
   - LRC-2010-372 Wetland 1

   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:
      - OHWW Elevation: (if known)

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

SECTION III: CWA ANALYSIS

A. TNW 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 IT'S ADJACENT WETLANDS (IF ANY):

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

(b) General Tributary Characteristics:
   Tributary is:
   Not Applicable.
   Tributary properties with respect to top of bank (estimate):
   Not Applicable.
   Primary tributary substrate composition:
   Not Applicable.
   Tributary (conditions, stability, presence, geometry, gradient):
   Not Applicable.

(c) Flow:
   Not Applicable.
   Surface Flow is:
   Not Applicable.
   Subsurface Flow:
   Not Applicable.
   Tributary has:
   Not Applicable.

   If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:
   High Tide Line indicated by:
   Not Applicable.
   Mean High Water Mark indicated by:
   Not Applicable.
   (iii) Chemical Characteristics:
   Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
   Not Applicable.
   (iv) Biological Characteristics. Channel supports:
   Not Applicable.

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

(i) Physical Characteristics:
   (a) General Wetland Characteristics:
   Properties:
   Wetland Name  Size (Acres)  Wetland Type  Wetland Quality  Cross or Serve as State Boundaries. Explain
   LRC-2010-372 Wetland 1  7.21  Forested palustrine wetland

   (b) General Flow Relationship with Non-TNW:
   Flow:
   Wetland Name  Flow  Explain
   LRC-2010-372 Wetland 1  Intermittent flow
   Surface flow is:
   Wetland Name  Flow  Characteristics
   LRC-2010-372 Wetland 1  Discrete and confined  Open, seasonal channel flows from west to east through a forested wetland
   Subsurface flow:
   Wetland Name  Subsurface Flow  Explain Findings  Dye (or other) Test
   LRC-2010-372 Wetland 1  Unknown

https://orm.usace.army.mil/orm2/?p=106 34-1769525503519283: NO:

7/26/2010
(c) Wetland Adjacency Determination with Non-TNW:

| Wetland Name | Directly Abutting | Discrete Wetland | Ecological Connection | Separated by
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2016-372 Wetland 1</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Berm/Barrier</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-2016-372 Wetland 1</td>
<td>15-20</td>
<td>10-15</td>
<td>Wetland to navigable waters</td>
<td>100 - 500-year</td>
</tr>
</tbody>
</table>

(iii) 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-2016-372 Wetland 1</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

(iv) 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-2016-372 Wetland 1</td>
<td>X</td>
<td>-</td>
<td>Herbaceous and woody wetland plants</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 Sensitive Species</th>
<th>Explain Findings</th>
<th>Aquatic/Wildlife Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2016-372 Wetland 1</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</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.

G. 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 affect 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>LRC-2016-372 Wetland 1</td>
<td>SEASONAL</td>
<td>Water flows from tributary within wetland into storm sewer pipes (36', 48' &amp; 60') which outlet into Tomah Creek. Tomah Creek empties into the Calumet River about 12 miles northeast of the project site.</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) (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2016-372 Wetland 1</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TNWs</td>
<td>29177.83176</td>
<td>29177.83176</td>
</tr>
</tbody>
</table>

Total: 29177.83176

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.\(^5\)
   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 appropriate Regional Supplements. Review area included isolated wetlands 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, utility 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 item shall be included in case file and, where necessary 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>Village of Park Forest Utility Atlas</td>
<td>Village of Richon Park, Illinois Farm Trace Subdivision</td>
</tr>
<tr>
<td>Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant</td>
<td>2 ft contour map</td>
<td>USDA soil survey</td>
</tr>
<tr>
<td>U.S. Geological Survey maps</td>
<td>USDA hydrologic map</td>
<td>USDA soil survey</td>
</tr>
<tr>
<td>National wetlands inventory map(s)</td>
<td>NRI wetland map</td>
<td></td>
</tr>
<tr>
<td>Photographs</td>
<td>1939 Aerial photography</td>
<td>Site visit photography</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. ADDITIONAL COMMENTS TO SUPPORT JD:
   Not Applicable.

---

1. Items checked below shall be supported by completing the appropriate sections in Section III below.
2. For purposes of this form, an RW is defined as a tributary that is not a TNW and that typically flow year-round or has continuous flow of at least "seasonally." (e.g., typically 3 months)
3. Supporting documentation is provided in Section III if.
4. Note that the Instructional Guidebook contains additional information regarding audience, criteria, and best practices for this phase.
5. Flow data can be described by identifying, e.g., "seasonal," 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 CWMA does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the CWMA has been removed by development or agricultural practices). Where there is a break in the CWMA that is unrelated to the wetland's flow regime (e.g., flow over a rock outcrop or through a culvert), the algorithm will look for indicators of flow above and below the break.
7. "Isc."
8. See footnote 4.
9. To complete the analysis refer to the key in Section III D.6. of the Instructional Guidebook.
10. Prior to assessing or declining CWA jurisdiction based solely on this category, Corps personnel will evaluate the action to Corps and EPA HQ for review as described in the CorpsEPA Memorandum Regarding CWA Art. Jurisdiction Following Reassessment.
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): 7-27-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2010-91 Braeburn Marsh

C. PROJECT LOCATION AND BACKGROUND INFORMATION: South of Fabyan Pkwy, North of McKee Street
   State: Illinois  County/parish/borough: Kane  City: Batavia
   Center coordinates of site (lat/long in degree decimal format): Lat. 41.861996°N, Long. -88.340372°W.
   Universal Transverse Mercator: NAD 83
   Name of nearest waterbody: McKee Road Tributary
   Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Fox River
   Name of watershed or Hydrologic Unit Code (HUC): Lower Fox (07120007)
   □ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
   □ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
   □ Office (Desk) Determination. Date: 7/27/2010
   □ 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.

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 2 (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: 8,500 linear feet: width (ft) and/or acres.
      Wetlands: 93 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. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   - Identify TNW: **Pick List**

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\(^1\) 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:**
     - **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\(^2\):
     - 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  □ Concrete  
□ Cobbles  □ 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: 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):  
□ 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/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:  

\(^6\)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: **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 a 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: McKee Road 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 II.B. Provide rationale indicating that tributary flows seasonally.
Provide estimates for jurisdictional waters in the review area (check all that apply):

☒ Tributary waters: 8,500 linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

☒ Tributary waters: 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: McKee Road 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: 93 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: .

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⁸See 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 Rupanos.
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 wetlands 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:

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):
- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA.** Data reviewed for JD (check all that apply) - checked items shall be included in case file and, where checked and requested, appropriately reference sources below:
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland Assessment 11-12-09 revised 2/5/10.
- 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: Aurora North.
- State/Local wetland inventory map(s): Kane County ADID, Pick List.
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is:
- Photographs: Aerial (Name & Date):
- or Other (Name & Date):
- Previous determination(s). File no. and date of response letter: 006149103.
- Applicable/supporting scientific literature:
- Other information (please specify):

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** Wetlands 1, 2, and 3 directly abut and contain McKee Road Tributary, as well as another small tributary. This flows to Mill Creek and to the Fox River, a navigable waterway and is therefore under Corps Jurisdiction.
APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 07-Jul-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2010-00240-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : IL - Illinois
County/parish/borough: McHenry
City: McHenry
Lat: 42.39857
Long: -88.20925

Universal Transverse Mercator

Folder UTM List
UTM list determined by folder location
• NAD83 / UTM zone 16N

Waters UTM List
UTM list determined by waters location
• NAD83 / UTM zone 16N

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

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., onsite 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: 28-Jul-2010
Field Determination Date(s): 26-Jul-2010

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 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: Fox River Chain-O-Lakes was studied by LRC as part of a SAMP.

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
      Water Name | Water Type(s) Present
      Pistakee Lake | TNWs, including territorial seas

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Area: (m²)
      Linear: 300 (m)

c. Limits (boundaries) of jurisdiction:

based on: Established by Corps navigation study.
OH/WM Elevation: (if known)

2. Non-regulated waters/wetlands:
Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be non-jurisdictional. Explain:

SECTION III: CWA ANALYSIS
A. TNWs AND WETLANDS ADJACENT TO TNWs

1. TNW

<table>
<thead>
<tr>
<th>TNW Name</th>
<th>Summarize rationale supporting determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pistakee Lake</td>
<td>Fox River Chain-O-Lakes is a known documented TNW.</td>
</tr>
</tbody>
</table>

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.

   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:
Not Applicable.

(b) General Flow Relationship with Non-TNW:
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

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

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

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

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

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

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

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

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW.
For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g., between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

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

1. TNWs and Adjacent Wetlands:

<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>Pistakee Lake</td>
<td>TNWs, including territorial seas</td>
<td>121.92</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>121.92</td>
<td>0</td>
</tr>
</tbody>
</table>

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:
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>-</td>
<td>-</td>
</tr>
<tr>
<td>- Corps navigable waters study</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- U.S. Geological Survey Hydrologic Atlas</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- FEMA/FIRM maps</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Previous determination(s).</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- Applicable/supporting case law</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Description

The Fox River Chain-O-Lakes is a known documented TNW, and was part of a SAMP by USACE/LRC.

1. Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2. For purposes of this form, an RFW 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.8 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 Corp-EPA Memorandum Regarding CWA Act Jurisdiction Following Repance.
APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

JD Status: DRAFT

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 20-Oct-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2011-00251-JD

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: Cook
City: 
Lat: 41.6217
Long: -87.7543
Universal Transverse Mercator: NAD83 / UTM zone 16N
Waters UTM List:
• UTM list determined by water location

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

Check if map/diagram of review area and/or potential jurisdictional areas is available upon request.

Check if other sites (e.g., offshore mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date: 10-Jun-2012
Field Determination Date(s): 07-Jun-2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There is navigable waters of the U.S. within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 326) 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 are waters of the U.S. within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 326) in the review area.

1. Waters of the U.S.

a. Indicate presence or waters of U.S. in review area:

1. Water Name: Water Type(s) Present: Wetlands adjacent listed TNWs that flow directly or indirectly into TNWs

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

Area: [in]
Length: [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: 46,066.9 acres
Drainage area: 1,051.5 acres
Average annual rainfall: 38.53 inches
Average annual snowfall: 31.5 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 30 (or none) river miles from TNW.
Project waters are 30 (or more) river miles from PNW.
Project Waters are 30 (or more) parallel/straight miles from TNW.
Project waters are 30 (or more) parallel/straight miles from PNW.
Project waters cross or serve as state boundaries.

Explains:
Identify flow route to TNW.5
Water to Boca Rio Ditch to Tinley Creek to Calumet-Sag Channel

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:

Tributary is:
Not Applicable.

Tributary properties with regard 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:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Size (Acre)</th>
<th>Wetland Type</th>
<th>Wetland Quality</th>
<th>Cross or Serve as State Boundaries, Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</td>
<td>6.1</td>
<td>Mostly emergent with some trees and shrubs</td>
<td>Moderate FQI of 13</td>
<td></td>
</tr>
</tbody>
</table>

(ii) 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>Wetland 1</td>
<td>Intermittent flow</td>
<td></td>
</tr>
</tbody>
</table>

Surface flow:

Wetland name: Wetland 1
Flow: Overland sheetflow
Characteristics: Water input from surrounding landscape passes through wetland and out into ditch via small opening.

Subsurface flow:

Wetland name: Wetland 1
Subsurface Flow: Unknown

(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 Barriers/Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(d) Proximity (Relationship) to TNW:

6/10/2010
ORM Printer Friendly JD Form

### (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>Sediments, road salts and grease.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</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 Sensitive Species</th>
<th>Explain Findings</th>
<th>Aquatic/Wildlife Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Birds, deer and,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>insects noted in</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>report.</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 1

Wetland 1 is a 0.1 acre wetland of mixed emergents, shrubs and trees. Water from the surrounding area filters through the wetland and out into the ditch. The wetland provides for stormwater storage and sediment/contaminant retention, which has an impact on both downstream flooding mitigation and reduction of pollution in the TNW, therefore demonstrating a significant nexus.

### 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>Size (Linear) [m]</th>
<th>Size (Area) [m²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland 1</td>
<td>2485.816</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2485.816</td>
<td></td>
</tr>
</tbody>
</table>

7. Impoundments of jurisdictional waters:
Not Applicable.

8. 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.
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 wetlands 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).
- Wetlands 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 MBP factors (e.g., 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

(Data items listed below are included in the table, where checked and requested, appropriately referenced below):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Maps, plans, plats or plat submitted by or on behalf of the applicant/consultant</td>
<td></td>
<td></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 copy with data sheets/delineation report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- U.S. Geological Survey Hydrometric Atlas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- USGS 9 and 12 digit HUC maps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- USGS National Wetlands Conservation Service Soil Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- National wetlands inventory maps(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>- Application/supplementing 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:

Description:

Site inspection on June 7, 2019 continued flowing water is tributary.

1. Based on the above table, the data reviewed for JD.
2. For purposes of this form, an RWV is defined as a tributary that is not a TIN and that typically flows year-round or has continuous flow at least "intersidrally" (e.g., typically 3 months). Supporting documentation is presented in Section II.F.
3. Note the following Guidebook contains additional information regarding sources, data values, and functional features generally and in the field:
4. Plan is revised by modifying, e.g., tributary A, which flows through the review area, to flow into tributary B which then flows into TIN.
5. A natural or man-made channel in the OHM that does not necessarily have jurisdiction (e.g., where the stream regularly flows underground, or where the channel has been covered by development or agricultural practices). Where there is a break in the OHM that is not related to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the appraiser will look for indicators of flow disrupted below the break.
6. See footnote #2.
7. To complete the analysis relate to the key in Section III.D of the Instruction Guidebook.
8. Prior to assigning or declaring CWA jurisdiction based solely on the 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 Reference.

https://orm.usace.army.mil/orm2/?p=106:34.6293452255023137::NO:: 6/10/2010
APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 26-Jul-2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, LRC-2010-02297-J01

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: IL - Illinois
County/parish/borough: McHenry
City: Woodstock
Lat: 42.27452
Long: -88.44861

Universal Transverse Mercator (UTM) List

- NAD83 / UTM zone 15N

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

Check if map/diagram of review area and/or potential jurisdictional areas is/is available upon request.
Check if other sites (e.g., offshore 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: 26-Jul-2010
Field Determination Date(s): 20-May-2010

SECTION II: SUMMARY OF FINDINGS

A. RIA SECTION 10 DETERMINATION OF JURISDICTION

There are those navigable waters of the U.S. under 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 are waters of the U.S. under 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

      | Water Name | Water Type(s) Present |
      |------------|-----------------------|
      | LRC-2010-297 Tributary to Nippersink Creek | Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs |
      | LRC-2010-297 Wetland | Wetlands directly assisting RPWs that flow directly or indirectly into TNWs |

   b. Identify (estimate) size of waters of the U.S. in the review area:
      Area: [sq ft]
      Linear: [ft]
   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

https://orm.usace.army.mil/orm2/Pp=106:34:76295150304380::NO:: 7/26/2010
(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 [ ] stream (straight) miles from TNW.
  - Project waters are [ ] stream (straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:
- Identify flow route to TNW.

Tributary Stream Order, if known:

<table>
<thead>
<tr>
<th>Order</th>
<th>Tributary Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
</tr>
</tbody>
</table>

(b) General Tributary Characteristics:

<table>
<thead>
<tr>
<th>Tributary Id.</th>
<th>Tributary Name</th>
<th>Natural</th>
<th>Artificial</th>
<th>Explain</th>
<th>Manipulated</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297  Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>Straightened</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Width (ft)</th>
<th>Depth (ft)</th>
<th>Side Slopes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Primary tributary substrate composition:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Silt</th>
<th>Sands</th>
<th>Concrete</th>
<th>Cobble</th>
<th>Gravel</th>
<th>Rock</th>
<th>Bedrock</th>
<th>Vegetation</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Condition/Stability</th>
<th>Runoff/Riffle/Pool Complexes</th>
<th>Geometry</th>
<th>Gradient (°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(c) Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Provides for</th>
<th>Events Per Year</th>
<th>Flow Regime</th>
<th>Duration &amp; Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>Perennial flow</td>
<td>20 (or greater)</td>
<td>Continuously flowing perennial stream</td>
<td></td>
</tr>
</tbody>
</table>

Surface Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Surface Flow Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>Discrete and confined</td>
</tr>
</tbody>
</table>

Subsurface Flow:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Subsurface Flow</th>
<th>Explain Findings</th>
<th>Dye (or other) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>Unknown</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Tributary Characteristics:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Bed &amp; Banks</th>
<th>OHWM</th>
<th>Discontinuous OHWM</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Factors other than 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 waterbody characteristics, etc.).

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Explain</th>
<th>Identify specific pollutants, if known</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(iv) Biological Characteristics. Channel supports:

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Riparian Corridor Characteristics</th>
<th>Wetland Fringe Characteristics</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

Habitat for: (as indicated above)

<table>
<thead>
<tr>
<th>Tributary Name</th>
<th>Habitat</th>
<th>Federally Listed Species</th>
<th>Explain Findings</th>
<th>Fish/Spawn Areas</th>
<th>Explain Findings</th>
<th>Other Environmentally Sensitive Species</th>
<th>Explain Findings</th>
<th>Aquatic/Wildlife Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Tributary to Nippersink Creek</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
2. Characteristics of wetlands adjacent to non-TNW that now 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. Ex.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297</td>
<td>1</td>
<td>PEM</td>
<td>Porian on the property is highly disturbed due to agricultural activity, but the wetland complex that it is a part of is listed on the NIDFW wetland map as High Functional Value Wetland</td>
<td>-</td>
</tr>
</tbody>
</table>

(b) General Flow Relationship with Non-TNW:

Flow:
- Not Applicable

Surface Flow:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Wetland</td>
<td>-</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-2010-297 Wetland</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 Barriers/Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Wetland</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-2010-297 Wetland</td>
<td>15-20</td>
<td>10-15</td>
<td>Wetland to navigate waters</td>
<td>50 - 100-year</td>
</tr>
</tbody>
</table>

(ii) Chemical Characteristics:
Characteristics (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-2010-297 Wetland</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

(iii) Biological Characteristics. Wetland supports:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Riparian Buffer Characteristics</th>
<th>Vegetation</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Wetland</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 Sensitive Species</th>
<th>Aquatic/Wetland Diversity</th>
<th>Explain Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Wetland</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>X</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 the tributary and the TNW). Similarly, the an adjacent wetland less than or outside the 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. RPs 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-2105-297 Tributary to Nipponmi Creek</td>
<td>PERENNIAL</td>
<td>Solid blue line on USGS map</td>
</tr>
</tbody>
</table>

https://orn.usace.army.mil/orm2/?p=106:34:76295150304380::NO::
7/26/2010
Provide estimates for jurisdictional waters 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-2010-297 Trinity to Napper Creek</td>
<td>Relatively Permanent Waters (RPWs) that flow directly or indirectly into TWNs</td>
<td>91.44</td>
<td>91.44</td>
</tr>
</tbody>
</table>

Total: 91.44 0

3. Non-RPWs that flow directly or indirectly into TWNs: 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 TWNs:

<table>
<thead>
<tr>
<th>Wetland Name</th>
<th>Flow</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-2010-297 Trinity</td>
<td>SEASONAL</td>
<td>Water may flow between wetland and stream permanently, but it is at least seasonal</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-2010-297 Trinity</td>
<td>Wetlands directly abutting RPWs that flow directly or indirectly into TWNs</td>
<td>4048.856</td>
<td>4048.856</td>
</tr>
</tbody>
</table>

Total: 4048.856

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

Provide estimates for jurisdictional wetlands in the review area:

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 wetlands 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 by jurisdiction (Explain):

Other (Explain):

Provide acreage estimates for non-jurisdictional wetlands 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 new professional judgment:

Not Applicable.

Provide acreage estimates for non-jurisdictional wetlands 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 (data items shall be included in case file and, when printed and requested, appropriately referenced below):

<table>
<thead>
<tr>
<th>Data Reviewed</th>
<th>Source Label</th>
<th>Source Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Geological Survey maps</td>
<td>10 Foot Topographic Map</td>
<td></td>
</tr>
<tr>
<td>USDA Natural Resources Conservation Service Soil Survey</td>
<td>Soil Survey</td>
<td></td>
</tr>
<tr>
<td>State/Local wetland inventory maps</td>
<td>AID Wetland Map</td>
<td></td>
</tr>
<tr>
<td>FEMA/PRM maps</td>
<td>Floodplain Map</td>
<td></td>
</tr>
<tr>
<td>Photographs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerial</td>
<td>2008 Color</td>
<td></td>
</tr>
</tbody>
</table>

B. ADDITIONAL COMMENTS TO SUPPORT JD: Not Applicable.
1. Items checked below shall be supported by completing the appropriate sections in Section III below.

2. For purposes of this form, a TMDL is defined as a disparity that is not a TMDL 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.

4. Note that the InstructUnit Guidance contains additional information regarding exclusions, changes, and essential features generally and in the intended context.

5. Flow rates can be defined by identifying, e.g., HoriLine 1, which flows through the review area, to flow into HoriLine 2, which then flows into TMDL.

6. A natural or man-made discontinuity in the CWA
does not necessarily mean jurisdiction (e.g., where the stream temporarily flows underground, or where the CWA has been removed by development or agricultural practices). Where there is a break (e.g., where a rock outcrop or through a culvert), the agencies will look for indications of flow above and below the break.

7. (and)

8. See Formula #3

9. To complete the screening refer to the key in Section III.D.8 of the InstructUnit Guidance.

10. Prior to assessing or denoting 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 Response.