

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 8/9/2016**
B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Chicago River, LRC-2014-409
C. PROJECT LOCATION AND BACKGROUND INFORMATION: Chicago River: Main Branch, South Branch, South Fork of South Branch, North Branch, and North Branch Canal.

State: Illinois County: **Cook, Lake** City: Multiple
Center coordinates of site (lat/long in degree decimal format): Lat. 42.048002 ° N, Long. -87.7813892 ° W.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Chicago River**
Name of watershed or Hydrologic Unit Code (HUC): **Chicago (07120003)**

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

- D. REVIEW PERFORMED FOR SITE EVALUATION: Office (Desk) Determination. Date: 8/17/2015**

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: The Main Branch, South Branch, South Fork of South Branch, and the North Branch of the Chicago River are designated as navigable waterways in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979). The North Branch Canal was created in the middle 1800's as a source of clay for the nearby brickyards. The North Shore Channel is navigable-in-fact.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area: TNWs, including territorial seas

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

Non-wetland waters: 2606600 linear feet: width (ft) and/or acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known):

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Chicago River, including the Main Branch, South Branch, South Fork of South Branch, North Branch, and the North Branch Canal.**

Summarize rationale supporting determination: The Main Branch, South Branch, South Fork of South Branch, and the North Branch of the Chicago River are defined as a navigable waterway in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979). The North Branch Canal was created in the mid 1800's as a source of clay for the brickyards.

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: 2606600 linear feet width (ft), Or, acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See below.

Corps navigable waters' study:

U.S. Geological Survey Hydrologic Atlas:

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: Multiple 7.5" quads.

FEMA/FIRM maps:

100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): , or Other (Name & Date):

Previous determination(s). File no. and date of response letter: multiple.

Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)

Other information (please specify): The North Branch Canal was created in the mid 1800's as a source of clay for the brickyards. The North Shore Channel is navigable-in-fact.

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SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 8/23/2016**
B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, **Lake Michigan, LRC-2015-324, Lehman Shoreline**
C. PROJECT LOCATION AND BACKGROUND INFORMATION: Lake Michigan within the Chicago District
State: Illinois, Indiana County: **Cook (IL), Lake (IL), Lake (IN), Porter (IN), La Porte (IN)** City: Multiple
Center coordinates of site (lat/long in degree decimal format): Lat. 41.886014 ° N, Long. -87.609180 ° W.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Lake Michigan**
Name of watershed or Hydrologic Unit Code (HUC): **Pike-Root (04040002), Chicago (07120003), Little Calumet-Galien (04040001).**
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
D. REVIEW PERFORMED FOR SITE EVALUATION: Office (Desk) Determination. Date: 8/17/2015

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

- Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: Lake Michigan was historically and is currently used for interstate and foreign commerce and recreation.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area: TNWs, including territorial seas

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

Non-wetland waters: 106 linear miles: width (ft) and/or acres.

c. Limits (boundaries) of jurisdiction based on: **Established by OHWM.**

Elevation of established OHWM (if known): 581.5.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Lake Michigan.**

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

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

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

TNWs: 106 linear miles width (ft), Or, acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See Below.
 Corps navigable waters' study: .
 U.S. Geological Survey Hydrologic Atlas: . USGS 8 and 12 digit HUC maps.
 U.S. Geological Survey map(s). Cite scale & quad name: Multiple 7.5" quads.
 FEMA/FIRM maps: .
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 Photographs: Aerial (Name & Date): , or Other (Name & Date): .
 Previous determination(s). File no. and date of response letter: multiple.
 Applicable/supporting case law:
 Other information (please specify): 1) Upper Great Lakes Connecting Channels Study, 1988. 2) Tanner, Helen Hornbeck, 1987, Atlas of Great Lakes Indiana History. 3) Larson, John W, 1980, Those Army Engineers: A History of the Chicago District. 4) Mayer, Harold M. and Richard C. Wade, 1969, Chicago: Growth of a Metropolis. 4) Danckers, Ulrich and Jane Meredith, 2000, Early Chicago.

APPROVED JURISDICTIONAL DETERMINATION FORM
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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): July 28, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, John Sheneman, LRC-2016-362

C. PROJECT LOCATION AND BACKGROUND INFORMATION: 1074 Whigam Road

State: Illinois County/parish/borough: **Lake** City: Riverwoods
Center coordinates of site (lat/long in degree decimal format): Lat. 42.17238°N, Long. -87.90222° W.
Universal Transverse Mercator: Zone 16

Name of nearest waterbody: Des Plaines River Tributary

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

Name of watershed or Hydrologic Unit Code (HUC): **Des Plaines (07120004)**

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

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

- Office (Desk) Determination. Date: July 12, 2016
 Field Determination. Date(s): June 10 & July 11, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: Defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 100 linear feet: 3 width (ft) and/or acres.
Wetlands: 0.34 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**.

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

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”:

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

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

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

(i) General Area Conditions:

Watershed size: 934048 acres
Drainage area: 836673 acres
Average annual rainfall: 34.36 inches
Average annual snowfall: 37.4 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

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

Project waters are **1-2** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Tributary flows south of subdivision where it becomes an RPW, then west into the Des Plaines River (TNW).

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.

Tributary stream order, if known: 1.

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

- Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: Tributary straightened in subdivision to run along roadside

and act like a ditch; north and south of Whigam Road, the tributary is natural.

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

- Average width: 3 feet
Average depth: 1 feet
Average side slopes: **3:1** .

Primary tributary substrate composition (check all that apply):

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

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

Presence of run/riffle/pool complexes. Explain: Absent.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 1 %

(c) Flow:

Tributary provides for: **Intermittent but not seasonal flow**

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

Describe flow regime: Tributary flows most of time when above freezing except during dry spells.

Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: Channelized along the roadside in the subdivision.

Subsurface flow: **No**. Explain findings: .

- Dye (or other) test performed: .

Tributary has (check all that apply):

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

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

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

(iii) **Chemical Characteristics:**

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

Explain: Water is cloudy due to sediments.

Identify specific pollutants, if known: .

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

⁷Ibid.

(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: 0.34 acres

Wetland type. Explain: Forested and Emergent.

Wetland quality. Explain: Moderate to High.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Wetland holds water after rain events, and slowly releases over time into tributary.

Surface flow is: **Overland sheetflow**

Characteristics: Overland flow is from north to south, and then narrows before entering ditch.

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

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **1-2** river miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

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

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: **2**

Approximately (0.34) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Name/ID</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Name/ID</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Wetland 1	Y	0.33	Wetland 2	Y	0.01

Summarize overall biological, chemical and physical functions being performed: The wetlands are each adjacent and contiguous to the tributary to the Des Plaines River, which has seasonal intermittent flow, and exhibits a surface water connection to a traditional navigable waterway. This surface water connection demonstrates the ability of the tributary to carry pollutants, flood waters, nutrients and organic carbon to the TNW. The adjacent wetlands have the ability to reduce the amount of pollutants and floodwaters reaching the TNW. The headwater wetland is receiving a percentage of its water from groundwater and from runoff from the surrounding uplands before it flows into Des Plaines River. Wetlands such as these provide stormwater storage, habitat, sediment/toxicant retention and nutrient removal/transformation. The decrease of sedimentation, pollutants, flooding, nutrients and habitat provided by the subject wetland provides a positive effect to the downstream relatively permanent waters and traditional navigable waters.

C. SIGNIFICANT NEXUS DETERMINATION

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

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: These wetlands alone, and in combination with other area wetlands, significantly affect the chemical, physical and biological integrity of the Des Plaines River. Stormwater storage provided by the subject wetlands affect the frequency and extent of downstream flooding, decreasing flood peaks in the Des Plaines River, and in turn impacting navigation and downstream bank erosion and sedimentation. The sediment and pollutant/toxicant retention provided by the subject wetland has a direct positive effect on the Des Plaines River in regards to navigation and aquatic food webs that are not adapted to thrive in sediment-choked environments. These factors contribute to the finding of a significant nexus between the on-site wetland and the TNW.
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

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

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

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

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

- Tributary waters: **100** linear feet **3** width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

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

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

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW 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: **0.34** 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).

⁸See Footnote # 3.

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

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: .

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos*.

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

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

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

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Hey and Associates, Inc. wetland delineation map.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: Wheeling HA 71, 1963, .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Wheeling 7.5", 1993, Pick List, Pick List, .
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Lake County, Illinois (2005).
- National wetlands inventory map(s). Cite name: Wheeling, .
- State/Local wetland inventory map(s): Lake County ADID, Pick List, .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland 1 is a large wetland complex which has a flow route south into the intermittent tributary of the Des Plaines River; and Wetland 2 directly abuts the intermittent tributary of the Des Plaines River. During my June 10, 2016 site visit, water was flowing strong in the tributary, and through the wetlands and into the tributary.

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): August 19, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Slaker Family Trust, LRC-2016-417

C. PROJECT LOCATION AND BACKGROUND INFORMATION: NW of I-88 and Rt. 31

State: Illinois County/parish/borough: **Kane** City: North Aurora
Center coordinates of site (lat/long in degree decimal format): Lat. 41.8017°N, Long. -88.34126° W.
Universal Transverse Mercator: Zone 16

Name of nearest waterbody: East Run Blackberry Creek

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

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

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

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

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

Office (Desk) Determination. Date: July 29, 2016

Field Determination. Date(s): July 5, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: 9.4 acres.

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

Elevation of established OHWM (if known): .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Pick List**.

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

2. Wetland adjacent to TNW

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

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).

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: East Run of Blackberry Creek starts from the north, and shows flow in all available aerial photos.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

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

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.

Identify type(s) of waters:

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetlands 1 & 2 are part of a larger wetland complex that was bisected by a man-made road; and extend west of Randall Road where it feeds the East Run Blackberry Creek as one of several headwater wetlands.**
 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: **9.4** 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: EnCAP Inc. Wetland Delineation Report dated April 20, 2016.
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Office concurs with data sheets/delineation report.
 Office does not concur with data sheets/delineation report.
 Data sheets prepared by the Corps:
 Corps navigable waters' study:
 U.S. Geological Survey Hydrologic Atlas:Aurora North HA 70, 1963,
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
 U.S. Geological Survey map(s). Cite scale & quad name: Aurora North 7.5", 1993, Pick List, Pick List,
 USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Kane County, Illinois (2003).
 National wetlands inventory map(s). Cite name: Aurora North,
 State/Local wetland inventory map(s): Kane County ADID, Pick List,
 FEMA/FIRM maps:
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 Photographs: Aerial (Name & Date):
or Other (Name & Date):
 Previous determination(s). File no. and date of response letter:
 Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
 Applicable/supporting scientific literature:
 Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on July 5, 2016 to walk site; and GIS review of historical aerials and flow route to Fox River.

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): August 18, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Freidine Enterprises, LRC-2016-454

C. PROJECT LOCATION AND BACKGROUND INFORMATION: SW Corner of Rt. 45 and 183rd Street

State: Illinois County/parish/borough: **Cook** City: Orland Park
Center coordinates of site (lat/long in degree decimal format): Lat. 41.5591°N, Long. -87.85503° W.
Universal Transverse Mercator: Zone 16

Name of nearest waterbody: Midlothian Creek

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

Name of watershed or Hydrologic Unit Code (HUC): **Des Plaines (07120004)**

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

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

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

Office (Desk) Determination. Date: July 28, 2016

Field Determination. Date(s): July 19, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: 4.27 acres.

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

Elevation of established OHWM (if known): .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Pick List**.

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

2. Wetland adjacent to TNW

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

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).

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: Off-site tributary has year-round flow to the west.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

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

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.

Identify type(s) of waters:

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetlands 1 & 2 are the same wetland complex, just on different development parcels on the map; this wetland system receives water from off-site to the east, and drains out via a pipe to the west into a tributary waterway.**
 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: **4.27** 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: C.M. Lavoie & Associates Wetlands Exhibit dated 07-07-2016.
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Office concurs with data sheets/delineation report.
 Office does not concur with data sheets/delineation report.
 Data sheets prepared by the Corps:
 Corps navigable waters' study:
 U.S. Geological Survey Hydrologic Atlas: Tinley Park HA 152, 1965.
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
 U.S. Geological Survey map(s). Cite scale & quad name: Tinley Park 7.5", 1993, Pick List, Pick List, Pick List.
 USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of DuPage and Part of Cook (1979).
 National wetlands inventory map(s). Cite name: Tinley Park,
 State/Local wetland inventory map(s): Pick List,
 FEMA/FIRM maps:
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 Photographs: Aerial (Name & Date):
or Other (Name & Date):
 Previous determination(s). File no. and date of response letter: LRC-2012-387; LRC-2007-287.
 Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
 Applicable/supporting scientific literature:
 Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetlands walked on-site during July 19, 2016 site visit, with flow observed throughout system and into tributary via pipe under 183rd.

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 26, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Aristotle Halikias, LRC-2016-470

C. PROJECT LOCATION AND BACKGROUND INFORMATION: SE Corner of 159th Street and Route 45

State: Illinois County/parish/borough: **Cook** City: Orland Park
Center coordinates of site (lat/long in degree decimal format): Lat. 41.60006°N, Long. -87.85056° W.
Universal Transverse Mercator: Zone 16

Name of nearest waterbody: Marley Creek

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

Name of watershed or Hydrologic Unit Code (HUC): **Des Plaines (07120004)**

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

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

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

Office (Desk) Determination. Date: July 26, 2016

Field Determination. Date(s): July 19, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: 4.75 acres.

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

Elevation of established OHWM (if known): .

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Pick List**.

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

2. Wetland adjacent to TNW

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

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).

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: Tributary starts at outlet on east end of site which goes into storm sewers.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

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

- Tributary waters: **10** linear feet **3** width (ft).
 Other non-wetland waters: acres.

Identify type(s) of waters: .

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetlands are part of a large complex, including open water, that drains into the storm sewer system on the east end of the site.**
 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: **4.75** 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: Gary R. Weber Associates Jurisdictional Determination submittal.
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Office concurs with data sheets/delineation report.
 Office does not concur with data sheets/delineation report.
 Data sheets prepared by the Corps: .
 Corps navigable waters' study: .
 U.S. Geological Survey Hydrologic Atlas: Tinley Park HA 152, 1965, .
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
 U.S. Geological Survey map(s). Cite scale & quad name: Tinley Park 7.5", 1993, Pick List, Pick List, Pick List, .
 USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of DuPage and Part of Cook (1979).
 National wetlands inventory map(s). Cite name: Tinley Park, .
 State/Local wetland inventory map(s): Pick List, .
 FEMA/FIRM maps: .
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
 Previous determination(s). File no. and date of response letter: .
 Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
 Applicable/supporting scientific literature: .
 Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on July 19, 2016 to walk site to observe flow into storm drains leading to Marley Creek.

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 29, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Munnaza Lakhani, LRC-2016-480

C. PROJECT LOCATION AND BACKGROUND INFORMATION: 20220 North Rand Road

State: Illinois County/parish/borough: **Lake** City: Deer Park

Center coordinates of site (lat/long in degree decimal format): Lat. 42.15669°N, Long. -88.04305° W.

Universal Transverse Mercator: Zone 16

Name of nearest waterbody: Buffalo Creek

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

Name of watershed or Hydrologic Unit Code (HUC): **Des Plaines (07120004)**

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

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

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

Office (Desk) Determination. Date: July 29, 2016

Field Determination. Date(s): July 27, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Non-wetland waters: 100 linear feet: 3 width (ft) and/or _____ acres.

Wetlands: 0.35 acres.

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

Elevation of established OHWM (if known): _____

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Pick List**.

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

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": _____

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).

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: Tributary to Buffalo Creek has defined bed and bank, and receives stormwater runoff from two inputs, and had flow year-round.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

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

- Tributary waters: **100** linear feet **3** 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: **Wetland forms between the two stormwater inputs, and then forms the tributary to Buffalo Creek at the south end of the wetland.**
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: **0.35** 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: Midwest Ecological Wetland Assessment Report dated June 21, 2016.
 Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 Office concurs with data sheets/delineation report.
 Office does not concur with data sheets/delineation report.
 Data sheets prepared by the Corps:
 Corps navigable waters' study:
 U.S. Geological Survey Hydrologic Atlas: Lake Zurich HA 208, 1966,
 USGS NHD data.
 USGS 8 and 12 digit HUC maps.
 U.S. Geological Survey map(s). Cite scale & quad name: Lake Zurich 7.5", 1993, Pick List, Pick List,
 USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Lake County, Illinois (2005).
 National wetlands inventory map(s). Cite name: Lake Zurich,
 State/Local wetland inventory map(s): Lake County ADID, Pick List,
 FEMA/FIRM maps:
 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 Photographs: Aerial (Name & Date):
or Other (Name & Date):
 Previous determination(s). File no. and date of response letter:
 Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
 Applicable/supporting scientific literature:
 Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on July 27, 2016 to verify wetland boundary and flow..

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 26, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Chicago District, Malik Ali, LRC-2016-498

C. PROJECT LOCATION AND BACKGROUND INFORMATION: NW Corner of 167th Street and 104th Ave.

State: Illinois County/parish/borough: **Cook** City: Orland Park
Center coordinates of site (lat/long in degree decimal format): Lat. 41.58701°N, Long. -87.87286° W.
Universal Transverse Mercator: Zone 16

Name of nearest waterbody: Marley Creek

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

Name of watershed or Hydrologic Unit Code (HUC): **Des Plaines (07120004)**

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

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

- Office (Desk) Determination. Date: July 26, 2016
 Field Determination. Date(s): July 19, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: Defined in People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, slip op. at 7 (S.D.Ill. Jan. 20, 1979).

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Non-wetland waters: 300 linear feet: 3 width (ft) and/or _____ acres.
Wetlands: 0.04 acres.

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

Elevation of established OHWM (if known): _____

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW

Identify TNW: **Pick List**.

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

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": _____

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).

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: Tributary shows flow on multiple aerials, and is mapped as a blue-line stream on the USGS Map.
- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

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

- Tributary waters: **300** linear feet **3** width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

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

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetlands extend on both banks of creek in north and south segment of channel.**
 - Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **0.04** 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: Maki & Company Jurisdictional Determination Report.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: Tinley Park HA 152, 1965, .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Tinley Park 7.5", 1993, Pick List, Pick List, Pick List, .
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of DuPage and Part of Cook (1979).
- National wetlands inventory map(s). Cite name: Tinley Park, .
- State/Local wetland inventory map(s): Pick List, .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: People of State of Ill. ex rel. Scott v. Hoffman, No. P-CIV-76-45, (S.D.Ill. Jan. 20, 1979)
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Site visit on July 19, 2016 to walk site to Marley Creek.